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Editor-in-Chief
EDWIN R. A. SELIGMAN

Associate Editor
ALVIN JOHNSON

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INTRODUCTION

In January, 1930, the first volume of *The Encyclopaedia of the Social Sciences* came from the press; approximately five years later the fifteenth and last volume was published. This work, prepared under the joint editorship of Edwin R. A. Seligman and Alvin Johnson, constitutes a major intellectual achievement and brings within comparatively brief compass the results of modern scholarship in the field of the social sciences. Its contributors, though largely American, are drawn from many peoples and countries—common heirs of the liberating forces of the modern world and spiritual descendants of the authors of the great French encyclopaedia of the eighteenth century. The articles, though inevitably uneven in quality, are uniformly of a high order and as authoritative as scholarship itself. *The Encyclopaedia of the Social Sciences* should be on the shelves of every library that pretends to provide its readers with the means for understanding man and his institutions.

In a number of courses at Teachers College the Encyclopaedia has proved of great value; in a general course in Educational Foundations it has been found indispensable. This course, still in its experimental stages, is taken by practically all first-year graduate students and represents an effort to bring together into a single synthesis, within the time limits fixed by the total program of training, those findings of biology, psychology, history, social science, and philosophy which are basic to the development of educational theory, policy and practice.

During the three years of the life of this course the members of the instructional staff have found themselves referring more and more to the articles of the Encyclopaedia. But since the classes have been large and the number of available sets of the Encyclopaedia limited, the references have remained relatively inaccessible to the great body of students. Out of this situation grew a demand for the reprinting in one volume of selected articles from the Encyclopaedia. The publisher and editors being agreeable, members of the staff proceeded to make the selections. The present volume is the result.

The actual selection of the articles was found to be extremely difficult. Rather it should be said that the task of rejection presented a real problem. When the recommendations of the

various staff members were assembled it was found that two volumes would scarcely contain them all. As a consequence, many articles which would be of great value in any course in the foundations of education had to be rejected. The final selections, moreover, were not made entirely on the basis of merit and relevance. The availability of materials from other accessible sources were also taken into account. For example, articles on psychology and education were largely omitted, not because they were thought to be irrelevant or inferior in quality, but because the needed contributions from this field would be available in other sources. This volume is viewed as the first of a series which will provide basic materials for the work of courses in the Foundations of Education. Other volumes are being prepared by members of the staff.

It is believed by those who have cooperated in securing the publication of this volume that it will be extremely useful to all who are working in the domain of educational foundations in the country. That it will be almost equally useful to classes in social science, particularly where some form of integration is attempted, seems to be highly probable. Finally, it should prove to be a valuable addition to the library of any layman who is interested in probing beneath the surface of the social problem.

The members of the Teachers College staff who initiated the preparation of the volume wish to thank the Macmillan Company for their cordial cooperation in the enterprise. By using the existing plates in printing it has been possible to keep the price low for a work of this kind. This has necessarily meant that the articles had to follow the pattern of the original volumes, but it was felt that the advantages of economy more than compensated for this minor irregularity in format. The staff believes that it is indeed fortunate that the editors and publishers have been able to make more accessible these scholarly materials.

THE EDUCATIONAL FOUNDATIONS
STAFF

Teachers College
Columbia University
October 1937

VII

The Rise of Liberalism

I. If liberalism be defined as the attitude which tests the validity of behavior and of institutions in terms of the rational consent of men, it is permissible to regard it as the younger and unwanted child of the Reformation. Social philosophy is, indeed, always the offspring of history; and the stages of its development are unintelligible save in terms of the events out of which it took its rise. Every thinker who essays the task of interpreting the needs of men is, at bottom, writing his own autobiography. For what he recounts is an analysis of his own experience, his effort to make systematic the lessons he has learned from the facts about him. Of no period is this generalization more obviously true than of the seventeenth century. If the Reformation gave birth to the absolute state, the poison of its autocracy provided its successor with an effective antidote. For the absolute state was born of war and persecution; and meditation upon the price to be paid for its establishment drove men to the consideration of alternative philosophies.

The seventeenth century is, in an emphatic sense, an age of critical transition; and it was therefore natural that its manifold uncertainties should make it the birthplace of the liberal temper. If older dogmas still lingered on, they were examined anew and challenged. If older philosophies still asserted their prestige, their rivals displayed a new and ultimately victorious certitude. It is the age in which scientific method and experiment first secured their dominating hold over the minds of men. It is the age, also, in which men began slowly, doubtless, and with pain to test religious claims in terms of social cost; and therefrom to replace the theological foundations of political authority by principles more capable of a rationalist interpretation. It is, not least, the age in which the edifice of feudalism is recognizably in profound decay, and economic organization becomes the effective expression of a national policy conceived in the terms of what state power is held to demand.

These changes are evident in the seventeenth century; but it is important to remember the prelude to their emergence. The overthrow of

the mediaeval papacy provoked everywhere a widespread spirit of challenge and inquiry. New dogmas no sooner arose than the demand was made for their justification; new authority was no sooner proclaimed than its pretensions were ruthlessly examined. Novelty in the sixteenth century was so widespread and so various that the rational temper which is the root of liberalism was its logical and necessary outcome. Lutheranism had hardly created conditions for the rediscovery of the divine right of kings when the emergence of Calvinist sects, especially in France, Scotland and Holland, made necessary the doctrine of a social contract. Huguenot writers had hardly insisted upon the right of revolt in the nobility before the Catholic opponents of Henry IV had transferred that right to the people at large. The ink was scarcely dry upon the claims of Spain and Portugal to empire when England and France entered into the competition for the spoils of geographical discovery. The revival of classical learning had poured a new content into philosophic and religious speculation. The rise of mathematics in its modern form pushed supernatural hypothesis from the center to the circumference of thought. The birth of Biblical criticism combined with economic need to make the cost of persecution—the advantage, therefore, of a rational tolerance—seem increasingly obvious over a widespread area. And if the absolute prince was prepared to play the despot in the name of his private creed, men were forthwith prepared to inquire whether political power was not a trust, to be forfeited where it was betrayed. Without the passionate intellectual ferment of the sixteenth century, the liberalism of the seventeenth would hardly have been possible; certainly it would have been neither so widespread nor so creative. As it was, it developed naturally in a soil well prepared for its reception.

With the seventeenth century we emerge into a Europe which had replaced the mediaeval ideal of a single and unified Christian commonwealth by a system of independent and sovereign states, no one of which conceived itself as

owing duties to its neighbor. The consequences of this change can easily be underestimated. It meant not only the rejection of the temporal supremacy of Rome and with it the rejection of the moral outlook in politics of which Rome was the appointed guardian. It involved also a growth in the secular temper, a replacement of values conceived in terms of eternal spirit by values conceived in terms of earthly power. This made possible the development of an idea of progress, the rejection of the social consequences involved in the doctrine of original sin. For power was dependent upon the discovery of new truth; and new truth, in its turn, was the result of applying reason to the analysis of phenomena. Once that step had been taken, the evolution was natural, first, to the insistence that there are no limits to the empire of mind, and, second, to the inference that the growth of mind was also the growth of good. Once such an attitude was possible, it was clear that the claims of tradition and antiquity were assailable in their innermost citadel. We can, indeed, already see the beginnings of the challenge in the sixteenth century. The reputation of Galen was obviously undermined by the researches of Vesalius; Aristotle lost his mediaeval preeminence after the attacks of Cardan, Ramus and Bruno; Copernicus' attack on the cosmology of Ptolemy made necessary a new and unimagined theory of the universe. The epoch of the Reformation was well aware that it stood upon the threshold of gigantic discovery. Gargantua tells Pantagruel that the field of study is wider in his day than anything known to Plato or Cicero or Papignan; and Peter Ramus with his claim that "a single century has seen a greater advance than . . . in the whole course of fourteen previous centuries" bespeaks a temper in no sense mediaeval. Obviously enough the seventeenth century reaped the harvest its predecessor had sown.

What, in fact, was that sowing? There are three conditions of the inheritance upon which it is necessary briefly to dwell. Geographical discovery, continuous throughout the sixteenth century, gave a new spaciousness to the minds of men. It accustomed them to the ideas of novelty and diversity; it broke the cake of custom to which they had been used as nutriment. The social consequences of the discoveries were tremendous. They involved corporate enterprise instead of individual enterprise; and this, in its turn, made the machinery of the state a vital factor in the encouragement

and protection of trade. They meant, in the second place, a realization, infinitely more acute than in the past, that human habits were immeasurably more various than had been imagined; and this, in its turn, was not only a dissolvent of tradition, but also, as is evident from the utopias, a new basis for social idealism. From *Utopia* to *Télémaque* every romance bears witness to a new attitude to paganism; and the introduction of the noble savage into literature is nothing so much as a method of criticizing traditional social arrangements. It is not too much to say that no factor was more potent than geographical discovery in persuading men that institutions are by no means unchangeable and that the human will is itself a factor in the making of change. The discoveries, moreover, meant settlements and colonies, and in these it was rarely possible to maintain the more rigorous formalities of status habitual in the old world. As a consequence travelers' tales from the West are tales of men who rise above their station, and of religious differences that are forgotten or abolished in the union necessary for self-preservation. Nor must we omit the significance of the voyages as a factor in the triumph of rationalism. For their revelation of variety in social arrangements, economic not less than political, gave rise to the need for comparison between different principles; and here, once more, the power of tradition had slowly to give way before the need to convince the reason of men. The necessity of kingship, the power of a priesthood, the permanent division of society into rich and poor, appear less final than before to men who have been told that societies both exist and prosper in which no such principles are for a moment tolerated.

The new geographical world implies, then, at least slowly, a new social world. The same result follows from the impact of scientific discovery and philosophic system. The essential effect of the Copernican revolution was the withdrawal of cosmology from the field of revelation. It had become necessary to interpret the universe not in terms capable of being reconciled with traditional theology but in a manner consonant with observation and experiment. In the long run it is not improbable that the growth of science was more fatal to ecclesiastical pretensions than any other single influence. For it established an order of nature which not only contradicted received theological opinion but also demanded unlimited inquiry

as the condition of its own development. Once again, therefore, it made for the acceptance of novelty, and this, in its turn, meant the triumph of rationalism. Implied in that victory was the perception of the common sense of toleration; for heterodoxy in natural philosophy could only be penalized in terms of an arrest of knowledge. By displacing the earth as the center of the universe, the Copernicans, albeit only half consciously, displaced the theology which had sponsored the adequacy of the Ptolemaic system. In its place they put the principle of reason and thereby they dethroned the pretensions of the supernatural to be the residuary legatee of human ignorance. For when so much could be rationally explained in terms of the new scientific certitude; when so much newly explained meant the overthrow of what tradition had persuaded men to regard as ultimate; the acceptance of the supernatural as the source of hypotheses gave way in part to skepticism and in part also to a belief that the patient analysis of phenomena by the new methods would alone reveal to the mind secrets which had thus far defied its scrutiny.

This, at least, is the attitude which, in an incomplete and fragmentary way, the sixteenth century passed to its successor. It is worth while to emphasize in a little detail the use made of the inheritance. Broadly speaking, the canon of the new era was the necessity of a direct appeal to nature. Reason was to act upon the evidence of the senses, not as in the previous period after all authority had been exhausted, but as the only way in which an authoritative explanation is available. Laboring upon the foundations which Copernicus, Kepler and Tycho Brahe had laid, the seventeenth century may be said to have built, by the method of observation and experiment, a new material universe. With its details, of course, we are not concerned. But we must note that the new calculus of measurement permitted the formulation of laws which explained the action of every body in the universe. And what to the age seemed striking about those laws was their revelation of a universe capable of reduction to a strict mathematical interpretation. The natural thereby became identified with the rational; and the discoveries which culminated in Newton's laws seemed to set a model for every field of human inquiry. Guesswork, chance, tradition, were simply annihilated. A world came into view in which hypothesis became certitude by experimental verification.

And when to the triumphs of the method in the field of mechanics were added those of Torricelli and Pascal, of Boyle and Huyghens, it is not difficult to understand the intoxication of the century with its own achievement.

The philosophic significance of the new science, indeed, was perceived even before its experimental triumphs had been secured. With Giordano Bruno it had already led to a half-intuitive perception that in a universe so constituted Christian truth became an episode and a fragment, that a mystic pantheism free from historic dogma of every kind was the only religious consolation left to man. In Bacon it led to the sense that by the scrutiny of the secrets of nature man might obtain power over her for his own ends. Central to his thought are a complete contempt for what has gone before and a confidence that the method of experimental inquiry is the highroad to truth. Science for him has become definitely humanized. It is independent of all theological trappings and subservient to definitely practical ends. It is a secular instrument, asserting its own right to investigate because of the power it will attain through knowledge so revealed. That Bacon only imperfectly understood the significance of the new discoveries is doubtless true; but his sense of their bearing upon human destiny is, in its largest outline, both new and far-reaching. It will, he has no doubt, give man new dominion over nature; and in that authority, discoverable only by the careful scrutiny of natural processes, the source of his happiness will be found.

What Bacon clearly implied was the idea of progress; and with that implication there necessarily goes a tacit condemnation of the whole theologic structure. He did not, indeed, as his insistence that his epoch is the old age of humanity makes clear, fully understand the import of what he was struggling to say. He was in the new age, but not completely of it. The philosophy which first frees itself completely from the ancient moorings is Cartesianism; and without a grasp of the impact it made, the rise of a liberal doctrine is unintelligible. The significance of Descartes lies in the majesty of the claims he made for the new methodology even more than in the discoveries for which he was sponsor. By his insistence on the supremacy of reason he challenged the whole power of faith and tradition. By his affirmation that the laws of nature were unchanging he banished the idea of a presiding

Providence from the order they governed. Once the revolution these notions implied had come to maturity, the triumph of a secular world over a theological conception of the universe was inevitable. And maturity came as soon as the discoveries of the century seemed to affirm the truth of Cartesian hypotheses. There were then present all the solvents required for the final rejection of mediaevalism. To abolish Providence was to throw man back upon himself. To throw him back thus was to insist that reason must know no bounds to the empire it investigates. Once that is argued, the way lies open for the emergence of the liberal spirit; and with its emergence in the scientific field it was inevitable that it should make its way into matters of social constitution.

This does not, of course, mean that the new science triumphed quickly, or that the spirit it involved made its way easily into other realms. Puritanism in England was hardly conscious of its influence or, where it was conscious, was hostile; while the Jansenist movement in France, though its leaders avowed themselves Cartesians, was in effect inimical to the progress of the scientific attitude. The cause of its victory lies in a wide variety of fields. Partly the reason is to be found in the discredit religion brought upon itself. The excesses of Puritanism produced a reaction, and in that new atmosphere what triumphed was not the religious spirit, but deism, on the one hand, and toleration, on the other. In France the religious revival of the early seventeenth century did not endure; and the struggles between Jansenist and Jesuit, between Catholic and Huguenot, enormously increased the area of religious indifference. This, in its turn, opened the road to the confluence of certain critical tendencies of which the cumulative power was enormous. There was the inheritance from Rabelais and Montaigne of the belief that man finds himself in an obedience to his impulses which, by its genial epicureanism, is at once a protest against the ascetic discipline of the church, and a gospel of pleasure for pleasure's sake which makes reasonable choice, and not traditional pronouncement, the path to the good life. In the hands of men like Saint-Evremond the attractiveness of this doctrine became obvious; and it fitted in easily with the picture of the "*honnête homme*" so admirably incarnate in the aphorisms of La Rochefoucauld. There is the development, further, of religious rationalism. Deistic hypotheses made enormous

progress during the century. Lord Herbert of Cherbury, Hobbes and Selden in England, the *Libertins* in France, Spinoza in Holland are all of them evidence of how far the old orthodoxy had been undermined. John Spencer and Spinoza laid the foundations of the scientific treatment of Hebrew institutions. Richard Simon started the scientific study of the Old and New Testaments. When Bayle came to write his great dictionary he was attempting to build a structure of disbelief the foundations of which had already been planned.

In a sense nothing shows this more clearly than the change in the temper of religious defense. Apologetics in the hands of Chillingworth and Tillotson, even of Pascal and Bossuet, has an atmosphere of reasonableness about it far different from that of the previous century. The half-conscious influence of the Cartesian spirit is omnipresent; and the extent of its triumph is perhaps measurable by the rapid growth of deistic literature in England once the Licensing Act was repealed in 1694. It is to be seen, also, in the constant admission by the theologians of the time of the degree to which skepticism had penetrated among the multitude. The age, said Tillotson, is "miserably overrun with skepticism and infidelity"; and Bossuet's letter to Huet of 1678 is an avowal of an unbelief which he does not doubt is wider than at any previous time. Nor is it without significance that the most famous defense of the Christian faith in the seventeenth century—that of Pascal—should have been hardly less a grammar of skepticism than a justification of credence.

Science, philosophy and theology, therefore, all reveal in the seventeenth century the increasing permeation of the rationalist temper. They show a generation driven back to first principles, with the eternal result that the inheritance is transformed in the process of examination. What the seventeenth century commenced its successor completed. What had been moderate and half-hidden in the one became determined and decisive in the other. The eighteenth century in France and England is nothing so much as a determined onslaught upon revealed religion. The attack of Hume is its supreme intellectual expression; but Voltaire, Diderot, Holbach, to name only the outstanding critics, set the ecclesiastical phalanx permanently upon the defensive. The real achievement of the philosophic movement of the eighteenth century was to complete the case

for a purely secular conception of social life. Building upon the acceptance of the Newtonian universe, they made the literal interpretation of the Christian revelation impossible to intelligent men. And therefrom they drew the inference that if its theology was dubious its power was without justification. They denied altogether the sanctions it proposed to exercise in political and social life. They destroyed that alliance between church and state which had made the beliefs of men the test of their capacity for citizenship. By rendering at best dubious the adequacy of the beliefs themselves, they made of religion a private matter independent of the overt expression of conduct, and created a secular ethic with which alone, as it received outward form, it seemed legitimate for the state to concern itself. Naturally enough this victory of the utilitarian temper did not make its way with ease. The triumph of the Toleration Act must be set alongside the defeat implied in the revocation of the Edict of Nantes. But it is notable that the eighteenth century in England saw no effective revival of religious persecution; and if Calas and de la Barre were executed in France, the most striking element in their fate is the applause which greeted Voltaire's vindication of their names. By the time of the French Revolution men were able to think and to say things that before 1700 would undoubtedly have involved a ruthless persecution. They were able to do so because the ecclesiastical interpretation of life had ceased to occupy the center of the stage. Its view of the universe having been rejected, the principles of the new philosophy were applied to realms which had once been deemed its own empire. And until the revival of mediaevalism with the romantic movement, the claim of theology to a dominating place was not so much challenged as neglected by those who set the temper of men's thoughts.

II. Not, of course, that the scientific development and its consequences are independent of political and economic events. Anyone who seeks to explain the rise of liberalism must at least indicate its connection with new institutions in the world of practical life. In one sense, at least, the fundamental event of the seventeenth century is the emergence of the middle class into political significance. The Dutch Rebellion and the English Revolution are the two outstanding expressions of its power; but it is also important to remember that civil war

in France, in destroying the nobility as a political factor and making possible the centralized despotism of Louis XIV, left the monarch and the middle class face to face as soon as dissatisfaction should develop. The rise of the middle class is important because its economic needs required a type of liberty of which constitutionalism was by all odds the best expression. The middle class needed exactly the central principles of liberal doctrine if it was to prosper. It required religious toleration because the establishment of this principle was inextricably intertwined with the rights of property. It required limitation upon monarchical prerogative lest it be ruined by arbitrary taxation. It required a controlled aristocracy because the establishment of internal peace was the essential condition of commercial prosperity. It required the abrogation of the mediaeval theories of restrictive regulation in the interest of morality because in such terms individual enterprise could not reach its maximum fruition. The new economic order, in a word, required a secular state; and a secular state, in its turn, required a liberalizing doctrine if politics was to be more than a branch of theology. What the scientific revolution had begun the utilitarian revolution completed. Right gave way before the claims of expediency. A state was built which corresponded to the wants of the new men to whom power had flowed.

It is worth while to dwell for a moment upon the ideological significance of the three great political events of the seventeenth century. The successful establishment of the Dutch Republic was the first organized invasion of the monarchical principle in the modern world. It was a success which came in the name of religious toleration and the right of a nation to determine its own destiny. It offered immediate proof that its basic principle was the parent of religious toleration; and its permanence was a victory not only for constitutionalism against autocratic government but also for the independent and sovereign state as the form in which the exclusiveness of nationalism seeks naturally to clothe itself. The English Revolution, in which the final synthesis of 1689 is only the culmination of a movement lasting some fifty years, brings with it not only religious toleration and constitutional government (both of them, as in Holland, the parent of commercial prosperity), but also the creation of a parliamentary system the implications of which

change the whole substance of political philosophy. There is even a sense in which the despotism of Louis XIV may be said to have enforced upon men's minds the belief that the constitutionalism of England and Holland was of superior validity as a governmental system. For after 1685 it was no longer accepted as other than a system in decay. The ruin it had produced was not only obvious, but in striking contrast to the prosperity of its rivals. Saint-Simon, Fénelon, Vauban, Boisguillebert, all point the lesson that in some fashion the arbitrary exercise of power is incompatible with the attainment of social good. Their successors among the *encyclopédistes* of the eighteenth century are occupied in nothing so much as the conversion of public opinion to that view. They were successful in their effort; but the *malaise* of the monarchy was too deep to make peaceful reformation possible. The failure of French liberalism in the seventeenth century to secure institutional expression is the essential cause of the breakdown in 1789.

Nor must we forget the influence upon social institutions of the breakdown of the mediaeval economic organization. A new economic imperialism destroyed the old supremacy of the eastern market; and with its coming the scepter of trade passed from Venice and the south German cities to the states of the Atlantic seaboard. Capitalist enterprise, especially in textiles and in mining, made impossible both by its extent and power the retention of ancient regulation. Commercial companies discovered in the use of the state prerogative methods of legal organization which were revolutionary in their significance. A financial technique was evolved which synchronized with both the collapse of rural social categories and a catastrophic change in the price system. By the middle of the seventeenth century the economic world was characterized by all the main features which distinguished it until the application of steam power to industry. The wants of the new economic order were incompatible with the mediaeval notions of fixity and status. The new markets demanded enterprise; the new factories demanded free labor. Religious opinion, not less than political philosophy, adapted itself with remarkable swiftness to the wants of a new world. They accommodated themselves to a conception of life in which the possession of property was the mark of virtue. They preached a gospel of work in which poverty became the expression of nothing so much as the disfavor

of God. That nature which, in the Middle Ages, had been the reflection of the Divine Will, became in the seventeenth century the response to human appetite—an appetite, moreover, freed by the new individualism from the restrictions of the earlier time. The development was rendered easy by the compromise effected by Calvin in his discussion of the problem of interest. Once the mediaeval ban on usury was lifted, religious precept was necessarily harnessed to the new institutions. The churches practically abandoned their obligation to formulate a social doctrine which should insist upon man's duty to his neighbor. When it could be plainly said that "it was not in simple divines to show what contract is lawful and what is not," it is obvious that the basis of economic arrangements had ceased to be theological and had become utilitarian. The Reformation and its aftermath had already shown how profound was the resentment of ecclesiastical discipline in the field of social policy; and whatever lip service was paid in the seventeenth century disappeared after the Puritan rebellion in England, and the reduction of the church in France to a pliant instrument of administrative purpose. Thenceforward the way was directly open to the idea of free contract as the basis of society; and with its emergence a purely secular standard of social values could prevail. Economic liberalism was the heir of the church's failure to understand the part it might play in the new world. An acquisitive society won the opportunity for unfettered development as soon as the church ceased to play the part of the critic entitled to test the moral adequacy of human effort and human institutions.

III. Political philosophy in the seventeenth century is, for the most part, English where it is important; the continent had no names to set alongside those of Hobbes and Locke. In Althusius, indeed, the impact of Dutch achievement and experience gave birth to theories of ample profundity; but there is little evidence to show that he deeply or widely affected the minds of men. The seventeenth century was mainly English because the prevalence of ruinous civil war upon the continent hardly left men space to do more than sigh for peace; and the relief at its coming was everywhere so great that, with rare exceptions, even an autocracy like that of Louis XIV was acceptable because it brought with it the cessation of conflict. But in England, until the last ten years of the century,

foreign war was an incident which hardly affected the substance of the national life; and the matter of internal conflict was such that the debate was bound to center about the fundamental problems of politics.

That is, indeed, obvious from the outset of the century. Already in Bacon, if we have a theory that is ultimately absolutist in temper, its whole basis is essentially utilitarian; and if he finds therein a place for the church, it is as no more than an effective instrument for the development of a state power conceived in purely secular terms. Even religious speculation may be said to have advanced the power of the secular state. For when the Church of England allied itself with the monarchy in the hope of destroying Puritanism it virtually abolished itself as an independent political authority; and the partnership of the Puritans with constitutional and radical theories hastened both the victory of Parliament and the advent of toleration. The lawyers, also, were a force in promoting the decline of ecclesiastical authority. For they not only attacked the desire of the church to be the inheritor of the religious courts, but they also provided the legal theories out of which the structure of the new state could be determined. Puritanism, also, acted necessarily as a dissolvent of mediaeval tradition. Since most of its devotees were to be found in the middle classes, it was inevitable that they should resent a state which, by persecution, interfered with their commercial effort and the prosperity of the country. They drew from their experience of its activities a bias against state action; and the liberal faith in a state whose interference is at a minimum is deeply rooted in nonconformist traditions. Puritan, also, may be said to be the dogma of equality in English political philosophy. Men like Lilburne and Rainsborough and Winstanley are the expression of the victorious spirit of a class which sees in the abrogation of special privilege the guarantees of its own well-being. The doctrine was premature as a philosophy because it failed to correspond to the distribution of economic power. The revolution that actually came was, as Harrington so magistrally perceived, essentially, in its final form, the constitutional expression of the new economic order which the previous hundred years had brought into being. A negative state, parliamentary government and toleration were all that the new class desired; and more radical theories, to which the disillusion of a revolutionary period natur-

ally gave birth, had to wait for a more ample realization.

The most significant figure in the first part of the seventeenth century is Thomas Hobbes (1588-1679), in sheer intellectual power the most eminent name in English political philosophy. To understand at once his place in the mind of the century, and the import of his doctrine, we must realize, first of all, the significance of his intellectual contacts. He represents, with all his errors and inadequacies, the "natural philosophy" of the seventeenth century in the fullest sense of that term. Few men have specialized so profoundly in omniscience. Physicist, geometer, psychologist, metaphysician, Biblical critic, social theorist, there is hardly any department of human knowledge which was not swept into the generous ambit of his system. The friend of Galileo, the secretary of Bacon, the intimate of Mersenne and the Cartesian society of Paris, he was in close communion with the advanced scientific outlook of his time. He represents the first systematic attempt in English philosophy to erect a theory of the state upon foundations altogether independent of theological principle. Whatever the burden of his conclusions, the temper in which he worked was essentially what the new liberal outlook required. He is consistently rationalist, consistently utilitarian, consistently Erastian. He was fundamentally materialist and, in essence, utterly hostile to supernatural hypotheses in the realm of social thought. Both his ethic and his psychology show how completely possible it had already become for their principles to be worked out upon a basis entirely secular in character. If Hobbes' political philosophy is, *de Maistre* apart, the most powerful plea for autocracy that has ever been made, it is a plea built upon the assumption that every state is a completely self-sufficient organism which does not need to look outside itself for the sanctions of its conduct. That, perhaps above all, was the thesis of which the new order stood most in need.

Though Hobbes himself always insisted that his social philosophy was an integral part of his general metaphysic, it is no injustice to him to relate its emphasis directly to the events amid which he moved. He had seen the failure of the gunpowder plot; he was in Paris when Henry IV fell a victim to the dagger of Ravillac; he witnessed the "hot gospelling" which accompanied the beginning and the end of the civil wars. The fact that his work was the product of

a timid temperament, writing when a strong and stable government was sought above all things, justifies our seeing in it the fruit of personal experience rather than literary influence. Machiavelli and Bodin, Barclay and Bacon, he doubtless knew and profited by; but the reader of his political writings will hardly fail to realize that, even more, he was the shrewd observer of Pym and Richelieu, of Strafford and of Cromwell. In no writer of the period, indeed, is the lesson rough hewn from vivid contact with men more obviously set down. The problem he set himself is how to make a common life for men whose actions are always born of fear and self-interest. He posits a state of nature, after the fashion of his age, but it is a grim enough condition, a state of anarchy in which every man's hand is against his neighbor, and in which the lust for power destroys all security. He does not spare the details of his picture. "Continual fear and danger of violent death . . . no propriety, no dominion . . . but only that to be every man's that he can get and for so long as he can keep it." In such a condition men may be taken as broadly equal in their faculties since, in the absence of a recognized power of control, no man has mind or bodily strength enough to be free from the art or sudden violence of his fellows. From so dismal a world the one object of life must be the organization of release.

And the means of release are to be had. For if man is avid of power he also fears death; he desires comfort, he searches for security. Reason therefore suggests to him some form of agreement whereby peace may be attained. Reason urges him to leave the state of nature and thus gives him a law which we may term a law of nature in the sense that it is a precept of reason; but it is not a law of nature in the accepted sense. The law of nature is the power of man to do in the state of nature whatever he thinks fit. Included in it, indeed, are precepts which reason commands for the sake of self-preservation; and these, in their totality, are something akin to the moral law. But they are pointless enough in the state of nature, since there is no common authority to enforce them. This law of nature may bind us in reason, even in the pre-social state, since the rule not to do to another what you would not have done to you is the clear road to self-preservation. But it is, there at least, a rule without a sanction. It gains authority only by being applied; and a civil state is needed for its application.

Hobbes therefore assumes the making of a

covenant between men such that all surrender their natural rights to a sovereign, either by institution or by force. They then owe to this sovereign—be he a one or a many—an allegiance that is absolute and entire. This sovereign owes no duties to his subjects, while they are bound to one another to obey his commands. If, indeed, protection from insecurity does not result from the relationship, the subject is entitled to the resumption of his natural rights. But even then he has no remedy against the sovereign (since the latter owes no duty to him) and he resumes them at his own risk (since he has broken the contract with his fellows). He assumes, then, a sovereign power which, once established, is unlimited in extent; and the form of government can make no difference to its absolutism. Law is then simply a command of the sovereign, enforced by the sanction he institutes; and since there is no limit to the sovereign's power there is no such thing as an unjust command and, by inference, as an unjust law. As between different states Hobbes insists that there can be no condition save one of mutual distrust; "the law of nations," he writes, "and the law of nature is the same thing." But the weakness of the law of nature has been the absence of a common superior to enforce it; and the law of nations must, similarly, mean no more than the right of each state to do the best for itself that it can. A vital future lay before this rigorous positivism.

We have thus a state in which, for the preservation of peace, a sovereign has been instituted with unlimited authority to impose his commands. Hobbes is insistent not only that a monarchical system is the best form of state but also that all others are in truth a mere perversion of it; "other governments," he writes, "were compacted by the artifice of men out of the ashes of monarchy after it had been ruined by seditions." His case for monarchy is urged with singular vehemence; it may be that the fate of Charles I and the position of Cromwell made his sentences even more biting than was customary with him. A monarch's interest, he says, is necessarily one with the public interest. He can get all necessary counsel, and that in secrecy; he is less liable to the inconstancy and faction which attend the sovereignty of an assembly of men. The evils to be expected from favoritism seem to him less than in the case of an assembly "where all will play this game on the principle of *hodie mihi, cras tibi*." Nor does he see more than temporary

inconvenience in the problem of the succession. He preaches the necessity for the strict control of churches by the state in passages of extraordinary power; and the need for the destruction of voluntary bodies is asserted by likening them to "worms within the entrails of a natural man."

Hobbes' thesis is, then, clear enough. The evil nature of man makes peace impossible without restraint, and the more concentrated the power exerted over him, the more successful that restraint is likely to be. The liberty left to the individual is twofold. He may do whatever the law does not prohibit; and he may even break the law since what binds him to obedience is simply the fear of punishment. But because the object of the state is security, Hobbes admits what for him is almost a legal right of disobedience in certain cases. Reason, he says, does not permit us to suppose that a man can be bound to kill or maim himself, or to be compelled to self-incrimination; nor is he bound to kill others or perform work of a dangerous kind; and whenever—a notable concession born, obviously, of the times—the sovereign is unable to give the protection for which the state is made, man resumes his natural rights. What, broadly, he has set out to do is construct a theory of social organization in which the radical doctrine of a contract is turned to the service of despotism. He has been so impressed by the conflicts of the previous century that he searches for a technique of order, whatever cost to individual freedom its institution may cause. So overwhelmed is he by the price of anarchy that he is not even prepared to pay tribute—as Filmer indignantly noted—to the fashionable doctrine of legitimacy. There is nothing about divine right in Hobbes, whether in the secular or ecclesiastical realm, except by way of contempt; there is nothing, either, about the rights of conscience except their danger. He had clearly no patience with Grotius' effort to regulate by accepted moral precept the practises of states; "covenants of government," he said, "without power of coercion are no security." He had no confidence in any power but the sword, no belief in any motives save the meanest in human nature. All that he asked for was a sovereign—whether Charles I or Cromwell was immaterial—who could force men to keep the peace. The state was thus, for him, concerned not with social good but with the condition upon which all human welfare depends; it was a restraint, evil, it might be,

but necessary upon men's appetites. The form he gave to his argument cut away the ground from under the feet of his opponents. Granted his premise—and it is difficult to see how a Calvinist, for instance, could deny his premise—and his conclusion followed with irresistible logic. He represents at its maximum that intense desire for a strong authority, impregnable both within and without, which was natural in his time. And his sense of the state as the sovereign legislator which could brook no rival, whose will was law because no will was superior to itself, was destined to play a fundamental part in future political philosophy. From Hobbes to Rousseau and therefrom to Hegel, on the one hand, and, on the other, to Bentham and thence to Austin, was but a step; and when that step was taken the theory of the state was finally redeemed from all possible contact with alien principles.

IV. In a sense, however, Hobbes had come too late; a theory of autocracy did not suit a generation which wanted, indeed, order, but an order compatible with individual freedom. How profound was that want is evident from the rapidity with which England recovered from the sense of shock administered by the Cromwellian regime. The legitimate king was restored, but he, not less than his people, recognized that he had been restored upon terms. The debate between 1660 and 1689 is about nothing so much as the terms of the constitution; both parties had to recognize that a constitution was inevitable. When the brief reign of James II seemed to imply a monarchical experiment outside the limits for which men were prepared, the invitation to William of Orange followed at once. Its consequence was a king who reigned by parliamentary title upon conditions set out in the clauses of statute. The Revolution of 1688 led straight to the Bill of Rights and the Act of Settlement. The dependence of the crown upon Parliament was established; the Nonconformists were rewarded with a partial measure of toleration; the development of the Bank of England and the party system set the seal of finality upon the new system. In all this was implied dogma incompatible with the rigorous theorizing of Hobbes. It needed a more mediating philosophy if innovations so striking were to be put in the framework of doctrine.

The theorist of the revolution was Locke; and he did not conceal either from himself or

from his readers the purpose of his effort. It was the intent of the *Two Treatises on Government*, as he said, "to establish the throne of our great Restorer, our present King William, and make good his title in the consent of the people." What he sought was a theory of the state which would justify exactly the principles of the revolution settlement. He had to show that there were limits beyond which the sovereign power could not be permitted to go. He had to explain how a state might be built in which the share of the people in power, the maintenance, therefore, of their rights in form of law, was definitely established. He had to justify a solution of the religious problem which maintained such variety of outlook as was compatible with necessary political unity. He had to build a polity which left unfettered the individualism of the new economic order. He had, in a word, to build an alternative to the Hobbesian philosophy; and to do that, as he saw, it was necessary to go back to the foundations of the state. Locke, it may be, lacked altogether the clarity and the relentless logic of his great predecessor; and he had little of that genius for compressing into a phrase the experience of a lifetime which makes Burke the one classic in English politics who can still be read with delight. But he saw with unsurpassed common sense that the main problem of his time was such a theory of the state as would justify the maintenance of freedom in terms of individual good. What he had to do he accomplished with such mastery that for seventy years he remained the outstanding expression of political liberalism; and not until the advent of Rousseau did the philosophy of the state take a new direction.

Why, asks Locke, does political power, "a right of making laws and penalties of death, and consequently all lesser penalties," exist? It can only be for the public benefit, and his inquiry is thus a study of the grounds of political obedience. Locke thus traverses the territory Hobbes had covered in the *Leviathan*, though he rejects every premise of the earlier thinker. The state of nature is, for him, governed by the law of nature. The law of nature is not, as Hobbes had made it, the antithesis of real law, but rather its condition precedent. It is a body of rules which governs, at all times and at all places, the conduct of men. Its arbiter is reason and in the natural state reason shows us that all men are equal. From this equality are born men's natural rights which Locke, like the independents in the Puritan revolution,

identifies with life, liberty and property. Clearly, as Hobbes had also granted, the instinct to self-preservation is the deepest of human instincts. By liberty Locke means the right of the individual to follow his own bent, granted only his observance of the law of nature. Property Locke derives from a primitive communism which becomes transmuted into individual ownership whenever man has "mixed" his labor with some object. This labor theory of value, it may be remarked, lived to become, in the hands of Hodgskin and Thompson, the parent of modern socialism.

The state of nature is thus, in contrast to the view of Hobbes, preeminently social. There may be violence or war, but this is only when men abandon that rule of reason inherent in their character. But the state of nature is not a civil state. There is no common superior to enforce the law of nature; each man, as best he may, works out his own interpretation of it. But because the intelligences of men are different, the law of nature is differently interpreted. Uncertainty and chaos result, and means of escape become necessary from a condition which human weakness would make intolerable. It is here that the social contract emerges; and just as Locke's natural state implies a natural man utterly antithetic to Hobbes' gloomy picture, so does his social contract represent the triumph of reason rather than of hard necessity. It is a contract of each with all, a surrender by the individual of his personal right to fulfil the commands of the law of nature in return for the guarantee that his rights as nature ordains them—life and liberty and property—will be preserved. The contract is thus not general, as with Hobbes, but limited and specific in character. It is not, as Hobbes made it, the resignation of absolute power to the hands of an irresponsible sovereign. It is simply a contract of the members of the community with themselves to form a whole which thus becomes that common political superior—the state—which is to enforce the law of nature and punish infractions of it. Nor is Locke's state a sovereign state: the word "sovereignty," significantly enough, does not occur throughout the treatises. It is a state in which the minority agrees to be bound by the will of the majority for certain defined ends; but its province ends when its action passes beyond those boundaries.

Locke will have no truck with absolute power; and he has no patience with the divine right of kings. He dislikes oligarchy, because it

inevitably emphasizes the interest of a group against the superior interest of the community as a whole. Democracy alone offers adequate safeguards of an enduring good rule; a democracy, that is, which is in the hands of delegates controlled by popular election. He did not like republicanism; experience, doubtless, of the Puritan epoch had taught him that its disadvantages were serious. He was content to have a kingship divested of legislative power so long as hereditary succession and the making of laws were deemed to be dependent upon popular consent. The making of law, the formulation, that is, of the rules by which life, liberty and property are to be secured, is legislation and this, from the terms of the original contract, was the supreme function of the state. The legislature was to be bound by its own prescriptions; and the executive—in his view, a body of minor importance—was simply there to carry out its will. For him, at the back of each governmental act there is an active citizen body occupied in judging it with single-minded reference to the law of nature and their own natural rights.

There is thus a standard of right and wrong superior to all powers within the state. "A government," he wrote, "is not free to do as it please . . . the law of nature stands as an eternal rule to all men, legislators as well as others." The social contract is thus secreted in the interstices of statutes, and its corollary is the right of revolution. For to deny that right was to justify the worst demands of James II. "The true remedy," he said, "of force without authority is to oppose force to it! Let authority but step outside the powers derived from the social contract and resistance becomes a natural right; the state of nature supervenes, and a new contract may be made for which there is more hope of observance." Here, also, Locke takes occasion to deny the central thesis of Hobbes that since power must be absolute, there can be no such thing as usurpation by the sovereign. But Locke retorts that absolute government is no government at all, since it proceeds by caprice instead of reason; and he argues that it is comparable only to a state of war since it implies the absence of judgment on the use of power. It is wanting in the essential and continuing element of consent, without which no law imposes obligation. All government, for him, is a moral trust, and the idea of limitation is implied therein. But an unenforceable limitation would be worthless, and revolution remains

as the reserve power in society. The only hindrance Locke suggests is that of number; revolution should not, he urges, be the act of a minority. For the contract is the action of the major portion of the people, and its consent should likewise obtain to the dissolution of the covenant.

The problem of church and state demanded a separate discussion; and it is difficult not to feel that the great *Letter on Toleration* is the noblest of all his utterances. Not, indeed, that it stands alone; for it came as the climax to a long evolution of opinion and experiment in which the moral rightness and political adequacy of intolerance had been attacked on every hand. But Locke covered the whole ground, and it is notable that his outlook is built upon a denial that any element of theocratic government can claim political validity. The magistrate is concerned only with the preservation of social peace and does not deal with the problem of men's souls. He is entitled to suppress where opinions are entertained either subversive of the state or destructive of peace; though even here Locke thought that force was the worst of remedies. In England he was prepared, on these grounds, to deny toleration to Catholics, atheists and Mohammedans. The first, he thought, deny to others the rights they seek themselves, and they owe their essential allegiance to a foreign power. Mohammedan morals are incompatible with the civil systems of Europe; and there is absent from atheism—Bayle had just shown the contrary—the only satisfactory criterion of good conduct.

Though church and state are thus distinct they act for a reciprocal benefit; and it is thus important to see why Locke insists on the invalidity of persecution. For the cure of souls, he argues, the magistrate has no divine legation. He cannot, on other grounds, use force since it does not produce internal conviction. But even if it did, force would still be mistaken. The majority of the world is not Christian, yet it would, if force were legitimate, have the right to persecute in the belief that it was possessed of truth. Nor can he accept the implication that the magistrate has the keys of heaven. "No religion," he says finely, "which I believe not to be true can be either true or profitable for me." He thus makes of a church merely a voluntary society with no power save over its members. It may use its own ceremonies, but it cannot impose them on the unwilling;

and since persecution is alien to the spirit of Christ, exclusion from membership must be the limit of ecclesiastical power. Nor must we forget the advantages of toleration. It leaves the mind and actions of men unfettered; its eldest child is charity; without it there is no honesty of opinion. Later controversy did not make him modify these principles; and in the hands of his successors in England and France they became a vital argument for the completion of the secular state.

If there is little in the different elements of Locke's doctrine for which originality can be claimed, the synthesis itself was new, and the rapidity of its acceptance shows how welcome was its liberal temper to its generation. What opposition there was, was but the eddies of a stream fast burying itself in the sands. As early as 1693 Bayle could write that Locke has become the "Gospel of the Protestants." French Huguenots and the Dutch drew naturally upon so happy a defender; and Barbeyrac, in the translation of Pufendorf which he published in 1706, cites no writer as frequently as Locke. Addison, on six separate occasions, speaks of him in the *Spectator* as one whose possession is a national glory; and Swift softened his hatred of the malignant Whigs to find the epithet "judicious" for the man who was their master. He was, said Warburton, "the honor of his age and the instructor of the future." The eulogy is not too strong; for English political theory until the time of Hume is little other than a variation upon his central theme. Montesquieu paid him tribute when he made the separation of powers the keystone of his own more splendid arch. The teaching of Rousseau is only a broadening of the channel dug by Locke; no element integral to the *Second Treatise* is absent from the *Social Contract*. Rousseau, indeed, in many aspects saw deeper than his predecessor. He understood the organic element in the state, where Locke was still trammelled by the bonds of his narrow individualism. Yet it would not be difficult to argue that Rousseau's theory is at no other point a real advance. The general will, in practical instead of semi-mystic terms, really means the welfare of the community as a whole; and for both the active consent of the individual citizen remains the central problem. Most of the difference between them, perhaps, lies in their historic position: Locke was justifying a revolution that had happened, Rousseau was to justify a revolution that had still to come.

It is this revolutionary element in Locke that gave him his significance in both the American and the French Revolutions. He laid down the essential thesis of liberalism that no government can ever be justified unless it draws its strength from the free consent of the governed. He argued that an invasion of reasonable claims makes legitimate a resort to force for the overthrow of the invading authority. That also is the essential claim of the Declaration of Independence; and the verbal resemblances between that document and the *Second Treatise* show how deeply Jefferson had drunk from the Lockian fountain. There was, indeed, reason and to spare for the irritable insistence of Dean Tucker that "the Americans have made the maxims of Locke the ground of the present war," and his jibe that Locke was "the idol of the Levellers of England," Price and Priestley, is true both of America and of France. For Locke is written large in the American bills of rights; and these, in their turn, were to be the principles of 1789. What Locke had sought to do was the effort also of liberals in America and France. He tried to construct a system of government which made it lie at the service of individual citizens. He, like them, was jealous lest it invade territory for the control of which he deemed it unsuited. He, like them, made individual consent, a vigilant citizen body, a limited executive, a separation of powers, the true bases of the state. It is not too much to claim that their triumph was his also.

V. It was not to be expected that the success of Locke in England would be paralleled upon the continent in his own lifetime, for the necessary institutions were wanting there. After 1614 the Estates-General did not meet again until 1789; and the *parlement* of Paris was a purely selfish legal corporation without real vision of a communal purpose. In both France and Germany, moreover, the combination of defective popular institutions and war was sufficient to make the need of a strong and centralized power more effective than the need for liberalism. What men ask for is a monarch who can rule, the cessation of civil strife, freedom from the heavy burden of taxation, relief from administrative oppression. In the vast pamphlet literature of the Fronde there are not half a dozen writers who seek any radical remedy; and even of these Claude Joly is the only one who has a system of any kind to recommend. The same conclusion is broadly true of Ger-

many. With the exception of Pufendorf, none of her political thinkers rises above a commonplace level. They are occupied either with merely legal technicalities or with the facile proof that monarchy is the best form of government. Even Leibnitz, for all his emancipation from authoritarian dogmatism, offers us little beyond a skilful defense, in the manner of Grotius and with no advance upon his matter, of the validity of natural law.

But the evolution of French political thought in the seventeenth century is significant. It has an official and a critical side. On the one hand are Richelieu and Bossuet, the one the outstanding architect, the other the supreme apologist, of the renovated monarchy; on the other are those—Jurieu and Bayle among the Protestants, Vauban among the officials, Fénelon among the clergy, Saint-Simon among the nobles—who ventured upon expression of their dissatisfaction with the regime. There is little in their argument that can be called at all justifiably a liberal doctrine. But the mood they represented, when linked with the inspiration that Voltaire and the *encyclopédistes* drew from Locke and England, and fanned by the new skepticism which grew from the union of naturalism, as in Saint-Evremond, and the claims of science, as in Fontenelle, became, with the decay of the monarchy in the eighteenth century, the distinctly French liberalism of which Voltaire and Montesquieu are the most important representatives.

Richelieu was a political philosopher indirectly only; the *Testament* and the *Maximes* are rather the acute reflections of a statesman upon his art than the expression of a coherent system. He represents, essentially, the supreme organizer who has come to restore order, whatever the cost of its imposition. Authority is to know no bounds, and disobedience is to be identified with sin. The prince, for him, is the state; to multiply the number of pilots is to ruin the possibility of a safe voyage. He insists upon the necessity of a rigorous but carefully masked control of the church; its doctrine may be left unfettered only so long as it does not impinge upon temporal power. Neither political assemblies nor corporations should be permitted in the state, for these represent a possible counterpoise to royal authority. Nor does Richelieu approve of municipal privilege; communities, he argues, never understand their own interests since “dans une communauté le nombre des folz est plus grand que celui des sages.” He does

not even hold with the supremacy of the courts in the purely judicial realm, but urges the need for extraordinary commissions to supplement, by royal prerogative, the inadequacies of judicial justice. The whole keynote of his theme is *raison d'état*; in matters so complex as those of politics, he argues in effect, attention to definite principles of action is impossible. He is not even deeply interested in the prosperity of the people; a little misery, he thinks, will keep their minds from wandering into the political realm. He has no use for the aristocracy, except as the basis of the armed forces of the state. The whole is a sinister picture of a man avid for power and careless of, even uninterested in, the methods by which it is maintained.

The explanation, of course, is a simple one. No powerful and ambitious man could have passed through the experience of religious and civil war without insisting that the only path to safety lay in the presence of a Machiavellian prince at the helm of state. He wrote of what he had himself achieved; and the years of Louis XIV's minority are an apt commentary on why his views shaped themselves as they did. The wars of the Fronde stand out in singular contrast to the contemporaneous civil wars in England. They were purely factional fights of selfish minorities seeking to profit themselves from the feebleness of an incompetent regency. They produced no great leader and no great thinker. In the several thousand *Mazarinades* there are not half a dozen which express more than the misery or the passion of the moment. Only Claude Joly, as the wars came to a close in 1652, showed some power of insight into the principles of government. He at least sees that all power must rest upon a popular origin and that there can be therefore neither a divine right of kings nor an unlimited royal authority. Kings exist for the good of their peoples, and tyranny implies a right of resistance. Joly sees, too, the importance of individual liberty; and his detailed condemnation of Richelieu's judicial methods shows that he holds firmly, as befits the grandson of Loisel, by the supremacy of fundamental law. He demands a meeting of the Estates-General, and refuses to admit a right of taxation without its consent. Nor, in his judgment, has the king the power to make law without the consent of the constituted magistracy of the realm; and this must be given without the exercise of undue pressure. He urges, finally, that no war should be made except as a last resort and then only after the

king has taken counsel with the Estates of the kingdom.

Here, at least in outline, is such a liberal program as neither Pym nor Hampden in England would have rejected. But it came too late. There were neither the leaders to advocate, nor the institutions through which to work, its possibilities. When Louis XIV began his personal rule in 1660, the stage was already set for centralized despotism. Louis himself was intent upon the fullest possible exercise of his prerogative; and the unintelligent memoirs that he composed for the instruction of his son reveal a mind in which the hypothesis of divine right had assumed axiomatic form. Contemporary theory in France, at least, had no creative alternative to propound. The textbook writers, Priézac, Scudéry and the rest, all repeat the ornate commonplaces which, as in the reflections made for Sir Thomas Elyot, did duty in sixteenth century England for political wisdom. It was not until the advent of Bossuet that an attempt was made to give the Augustan autocracy a theoretical foundation.

Few writers on politics have received panegyrics so splendid as Bossuet; few also have done so little to deserve them. At bottom his political philosophy is little more than the conclusions of Hobbes loosely set in a theological context which he did not realize to be already obsolete. The magnificent eloquence, indeed, serves often to conceal the poverty of the thought; and the reality of the learning in which the conclusions are clothed often gives them the air of being a system of rigorous inferences from the accumulated wisdom of the ages. But what, in sober fact, has Bossuet to say? Like Hobbes he draws a grim picture of an evil state of nature from the anarchy of which men are only too glad to escape. Like Hobbes, also, he insists that absolute power alone could end so terrible a condition. With his English predecessor he concludes that the rights of the subject are no more than a concession from the sovereign power, and that monarchy, which best assures peace and order, is by far the best form of government.

Here, at least, is nothing of novelty. It is true enough that Bossuet, unlike Hobbes, sets his conclusions in the background of a philosophy of history which, built upon the theses of St. Augustine, makes Providence the master of historic events. It is true also that the principles of his *Politique tirée de l'Ecriture Sainte* are made to depend upon the support

of Scriptural texts. But the foundations of his system are in fact mostly independent of all theological apparatus. The unity of a people is dependent on sovereignty being invested in an absolute prince whose power is of God: "the royal throne," he says, "is not the throne of a man but of God Himself." All government is entitled to respect, and revolt is the antithesis of the spirit of Christianity. No citizen has any right to attack the public power; and therefore even the prince who does evil must be obeyed. He denies altogether the contractual origin of political authority, and makes prescription the basis of a title however brutal its origin. Popular government, for him, is always the parent of tyranny; and the freedom of the individual means in the end popular government. Kings therefore are absolute, since without such power they cannot fulfil the purpose of authority. To be absolute, indeed, is not to be arbitrary; the king should obey those fundamental laws which are built on equity and right reason. Freedom of the person and property deserve respect; and the king must make the care of his people his first obligation. But he is himself the sole judge of how and when his obligation should be performed.

It is not difficult to see beneath the mask of Bossuet's seeming abstractions a system of generalizations from the events of his time. His state of nature is the wars of the Fronde; his people as the tyrant are the Puritans under Cromwell; his king who acts as father, under God, to his subjects is the professional eulogy of Louis XIV. As a philosophy it might well have succeeded had prosperity attended upon Louis' effort. But defeat abroad and misery and intolerance at home combined to evoke a protest against its assumptions which provided the foundation for the emergence of liberal ideas. The Huguenot pastor Jurieu proclaimed, if in exile, the right of the people to cashier an evil ruler, and insisted that its sovereignty is the only legitimate basis of political power. Bayle was only the most learned and able of a score of writers who made the case for religious toleration with a width and insight that not even Locke surpassed. Vauban and Boisguillebert exposed, in merciless detail, the ruin wrought by Louis' disastrous policy; and though the fiscal remedies they had to propose were timidly incomplete because they lacked a sound institutional scheme to give them effectiveness, at least they showed that men were prepared for innovation.

The diaries and projects of Saint-Simon reveal that even at the center of the aristocracy the grim despotism of Louis' later years was bitterly resented; and if his proposals are no more than reactionary traditionalism they are at least striking in the whole-hearted condemnation they imply. Boulainvilliers also, himself a lesser nobleman, reveals a mind utterly out of accord with the regime under which he lives. He attacks as vicious the administrative centralization which was the whole pivot of Louis' absolutism; and with a knowledge of past French history remarkable for its time, he condemns both divine right and *raison d'état* as incompatible with the well-being of the state. Like Saint-Simon he has no better remedy than the restoration of traditional institutions—a limited monarchy, a reformed administration, an active Estates-General. But Boulainvilliers had at least grasped the essential weakness of the regime he attacked; and his power of technical criticism is a new feature in the literature of his age.

Yet it is perhaps Fénelon who shows most fully how liberal was the new temper which had emerged. The tutor of the Duke of Burgundy and Archbishop of Cambrai, he had seen the working of the system from inside, and his rejection of its principles was built upon an intimate experience. He was in no sense of the word either an innovator in reform or an originator in ideas. The power he had and the influence he exerted came from the courageous clarity of the testimony he bore to the ruin worked by Louis XIV and from his determination to try all political conduct by the touchstone of ethical principle. He wrote not merely as a Frenchman but as a citizen of Christian Europe, concerned to insist upon its general interests even above the special rights of France, nor is it insignificant that his most earnest remarks should be set in the mouth of a pagan. If he had favored the revocation and applied its cruelties in his own diocese, he learned the error of persecution and insisted that France needed not merely the recall of the Huguenots but a system built upon toleration. Ultramontane though he was, he disliked the interference of the church in political affairs, since he saw that the alliance of church and state made inevitably for ecclesiastical slavery. He denied that love of one's country can absolve a patriot from duty to mankind; and he attacked aggressive war as in all cases indefensible. Not only did he urge the restoration of French

conquests, but he saw the wrong done to Europe by the French occupation of Spain, and he wrote of Protestant and tolerant Holland as the hope of mankind. To him all power was by its nature poison; and he wrote of kings that their badness is practically inevitable. They must accordingly be the mere ministers of the law; and a constitution is essential to a well ordered state. For him political authority was the rightful possession of the nation, and there was a health-giving energy in its exercise for which no despotism, however efficient, could compensate. Despotism, indeed, always saps the strength of a people, and he predicted revolution as its necessary consequence. His remedies are not, perhaps, original. A limited monarchy flanked by a system of local and central assemblies, in which the aristocracy played the predominant part, had been recommended by others. But Fénelon saw the importance of legislation as a weapon for molding character. He realized, too, that participation in government is itself an exercise in the creation of individual personality. He demanded freedom of trade, an administration whose methods are built on a careful statistical assessment of the national resources, an adequate civil service and a purified judiciary. In his emphasis on the danger of luxury, the evil of an idle class, and the necessity of education as the base of national well-being, there is, clearly enough, something of the Platonic revolutionary. And his conception of history as set out in the *Letter to the Academy*, his insistence that institutions are more important than persons, that the habits of the nation are the pith of the record, show him as a genuine precursor. Save Bayle, no thinker of the seventeenth century was more comprehensively the instructor of the eighteenth; Saint-Pierre, Montesquieu, Rousseau all went to school to his teaching.

The boldness of Fénelon's attack upon the system of Louis XIV goes far beyond that of his contemporaries. Bayle, indeed, laid down the ultimate methodology for a deeper and more destructive analysis; but his own political proposals are, toleration apart, merely the expression of the scholar's conservatism. The Huguenot exiles, most notably Jurieu in Holland and Abbadie in England, maintained with vigor the dogma of popular sovereignty; but their opposition to the regime was rather a *cri de coeur* than a soundly reasoned philosophy, and their position as exiles detracted from the

influence of what they had to say. The first ideas of French liberalism moved upon historic and conservative lines. What was proposed was to revive the power of the aristocracy, to restore the Estates-General and the provincial assemblies, to cultivate the mediaeval polity, rather than to bring the people into the structure of government. It was not until Voltaire had made England an example to French thinkers, and bankruptcy had become the eternal partner alike of success and failure in foreign policy, that revolution was accepted as the highroad to stability.

VI. France apart, European speculation in the seventeenth century is remarkable rather for its lack of distinction than for ideas by which the current thought was profoundly moved. Spinoza in Holland and Pufendorf in Germany almost exhaust the list of those who exerted anything more than a superficial influence. The reason for this barrenness is not far to seek. The devastating influence of the Thirty Years' War made men inclined to peace at any price; and epochs in which consolidation is the outcome of fatigue are rarely capable of speculation upon ultimate principle.

About Pufendorf there is no need to say much. He was in no sense of the word an original thinker, and his importance lies rather in the temper and amplitude of his mind than in any capacity for piercing to the root of political foundations. His *De jure naturae et gentium*, first published in 1672, represents an attempt to unite the irreconcilable systems of Grotius and Hobbes. Like the former he pleads for the supremacy of reason in affairs of state; and the law of nature is for him a rational rule, inherent in the character of man and enabling him to distinguish right from wrong. Like Grotius, also, he makes the state of nature sufficiently rational and peaceful to render it difficult to know exactly why civil society was ever deemed necessary. But with Hobbes he argues that most men are the creatures of impulse and that only in the civil state is respect for reason possible to the majority. This state he traced back to a twofold contract. Subjects contract with subjects to create a political community in a particular form, and subjects then contract with those designated to rule upon their respective rights and duties. He does not agree with Hobbes that the ruler is absolute. His power may be supreme, but it is restricted always by the terms of the contract. The way in which this restriction is to operate,

however, the sovereign is always to decide; and whatever validity the theories of Hobbes possess against the arguments of the great Dutch thinker must hold against Pufendorf also. He resembles Hobbes in his low view of men, his emphasis upon the worthlessness of the multitude, the emphatic repudiation of the Grotian hypothesis of a law of nations binding upon all men because it embodies the best experience of mankind. But the really outstanding feature of Pufendorf's work is its insistent secularity of temper. He will have nothing to do with explanations of political authority which find their source in theology; and he roundly denounces the defective obscurantism of contemporary ecclesiastics who seek political philosophy elsewhere than in the behavior of men. He is, in short, comprehensively rationalist in outlook; and the immense success which attended his book is evidence of the degree to which the rationalist principle accorded with the demands of the time.

Yet for all his success it is difficult to see in Pufendorf much more than a sublime mediocrity. Spinoza of course is one of the outstanding names in the whole history of political philosophy. But it is to be remembered that for almost a century after his death his influence on politics was small. Pufendorf and Bayle seem only to be outraged by his ideas. Locke does not mention him, while Vico dismisses him in one contemptuous sentence. It was not until the time of Lessing and Goethe that his supreme merits were understood in any effective degree.

The reason, indeed, is not far to seek. For him, as for his political master Hobbes, the whole basis of politics was rigorously utilitarian; but he differed, as he himself said, from his illustrious predecessor in that he applied his method with undeviating consistency. If there are present in him things like the state of nature and the idea of contract, none of them is essential to his method. His central thesis is the identity of right with power; and he uses the experience of history—his knowledge of events is remarkable for his age—to prove that the lesson of history is a justification of liberalism. For in the long run, Spinoza argues, the true and eternal sources of power are rational in character. The action of the state is always limited in fact by the knowledge that men are always measuring themselves against it; and it has power only as they fear it or love it. But, again in the long run, it cannot control those

things which men "cannot be induced by rewards or threats" to accept; therefore opinion and religion are outside its sphere. A state, he urges, cannot make men moral or religious, and its true strength is dependent upon their morals and religion. The true springs of action are in the internal nature of men, and the power of the state gives only outward conformity, which is never permanently decisive. Force, therefore, for Spinoza is powerless without reason. The ruler's right is thus limited by his wisdom and insight, by the measure of his justice and forbearance. For otherwise his subjects will depose him, or the civil state will be a condition of anarchy tempered by despotism. Wherever, he argues, there is sedition, there also is to be found governmental wrong. Nor does Spinoza think differently of international relations. Expediency suggests here, as in the internal economy of the state, the ultimate wisdom of the golden rule.

No more striking defense of liberal principle has ever been made in purely utilitarian terms; and it is upon the same terms, also, that Spinoza bases his defense of democratic systems. Here, indeed, the deep influence of Holland upon his theorems is obvious. The necessity of checks and balances, a wide diffusion of power to safeguard local liberties, the insistence that in a democracy alone is the government most representative of the community—this could hardly have been said in the seventeenth century save by an Englishman or a Dutchman. To Spinoza monarchy is clearly abhorrent; and though he analyzes the aristocratic principle with some sympathy, it is clear that the unfinished portion of the *Tractatus politicus* was to have been the culminating point of his speculation. Even as it is, the implications of the doctrine are unmistakable. The core of the argument is the insistence that the best government is that whose policy embodies the maximum self-interest. This is democracy because it allies with itself the will and the reason of the largest number of citizens. It makes their power its own; and it thus makes its right more permanent by the identification of their well-being with its own fortunes.

The eighteenth century, therefore, inherited from its predecessor a tradition of which the liberal principle was definitely a part. The idea of consent had been everywhere adopted as the obvious answer to the divine right of kings. The notion of utility had been everywhere put forward as the test to which the monarchical

system must conform. Consent meant the consent of men; utility meant the test of results. Each was in its essence an appeal to reason against an appeal to a principle of authority clothed in some mystic sanction which reason was unable to penetrate. This liberalism, indeed, was as yet a method of examination, a challenge to the existing order, rather than a philosophy which had become a part of the normal mental climate of the generation. It needed the moral bankruptcy of church and state before liberalism could move from a thesis of reform to a thesis of revolution. The work of the next generation was to apply it to existing institutions with an incisiveness and a determination which exhausted the moral credit of the new order. When that was done, liberals were in a position to prove that they had come not less to fulfil than to destroy.

VII. Until the seventeenth century was well advanced, historical studies had for the most part assumed three forms. Sometimes, as with de Thou, they recorded the passage of events as these impressed a single observer; they are the generalization of a diary rather than the philosophic examination of a record. Sometimes, as with Rymer, they are carefully compiled documents which are less history than the materials of history, even if, as with Tillemont, they reveal a learning and a documentary insight in advance of anything previously known. Or again, as with Bossuet, historical writing may be the anteroom of a particular theology, an exercise in the proof of a definite religious thesis, instead of a scientific effort to explain the evolution of civilized life.

It cannot be said that the seventeenth century saw any revolutionary change in the attitude to historiography. The necessity for care in controversy produced by the multiplicity of religious sects conduced to a greater precision in the handling of evidence; the great Anglican school of men like Usher and Bingham did notable work in the reconstruction of early religious history, and Tillemont, Baluze and Mabillon began forging the essential weapons of scientific scholarship. Yet even though such works as those of Bacon on Henry VII, of Selden and Conring on legal antiquities, of Gruter on classical inscriptions make it clear that a new and secular temper was emerging, the area of its activity was as yet by no means wide. Bossuet was able to suppress Père Simon's effort to handle the Old Testament in

a critical spirit. Lanoue's analysis of martyrology earned him abuse and not understanding. Pouilly's investigation, in 1722, of the legends of early Rome merely led to his denunciation as an atheist. Until the very end of the *ancien régime* it was both difficult to procure materials and dangerous to announce untoward results. Fréret went to the Bastille for denying that the Franks were Gauls. Giannone died in prison for his history of Neapolitan institutions. The Common Council of London withdrew its grant from Carte for maintaining that the Pretender had cured the "king's evil." Muratori could not gain access to many princely archives lest his researches should disturb some princely title.

Yet the progress of a rationalist temper is unmistakable. The skepticism of Bayle made possible the rationalism of Voltaire. Bentley in England, Reimarus in Germany, Vico in Italy made it evident that the critical attitude was European in its extent. When Hume in the mid-eighteenth century wrote his history of England he was attempting a broad narrative of the national life such as literature had not previously known. With many faults it added notable qualities to English historiography. If it was often prejudiced it was never enthusiastic; and the *odium theologicum* was entirely absent from its pages. Hume saw, too, the significance of social and economic history; and if he used his insight too casually, at least he used it. No British writer had previously seen the need to weave the threads of historic events into a single whole. What he began, Robertson continued. Nothing now remains of the histories of Scotland, Charles V and America with which he delighted his generation; although the man who gave to Keats his finest metaphor may perhaps rest content to have been supplanted by later research. Yet Robertson, like Hume, has great merits. He made history literature, and it did not leave his hands the servant of a particular party. He brought together a great mass of facts into an orderly and coherent whole. He was neither profound nor widely read; but at least, like Hume, he made mere analytic compilation obsolete.

Both Hume and Robertson show that it was beginning to be difficult to retain history as the servant of authority; Voltaire and Gibbon make it evident that, in truth, the battle of rationalism was in its large outlines already won. With Voltaire a new epoch in historiography genuinely begins; the critical spirit takes possession

of its kingdom. Providence is banished from the stage, passion is analyzed by the cold weapons of reason, civilization becomes the phenomenon to be examined. He realized the significance of documents. He understood that the worth of history is dependent upon the worth of testimony. If he hardly grasped the category of time, at least he understood the category of space. With him Christianity is no longer the central theme but simply an incident in universal history. His books are no longer either pamphlets or funeral orations but genuine attempts to explain the phenomena he encountered. He speaks like an analyst and not, like Bossuet, as a prophet. He banished the supernatural from history and thereby brought it down from the clouds to earth. If the *Essai sur les mœurs* is today inadequate, it is only because he pointed out the path by which its inadequacy might be made known. If we do not accept his view of Louis XIV as he conceived it, it is still in large outline his method of interpretation that prevails. Voltaire wrote history as a humanist, and he had the insight, accordingly, to see that nothing human was unworthy of his examination. The people as well as the court, the lawyer as well as the soldier, the man of letters not less than the priest—these enter for the first time into the necessary ambit of his scheme. A critical philosophy of history would doubtless have come without Voltaire; but no man made its coming more certain or its success more assured.

If the ambit of Gibbon was in a sense less wide, the character of his achievement was hardly less notable. The *Decline and Fall* is one of those books literally beyond praise; and it may be said with confidence that no work of its amplitude has ever been less touched by the corrosive hand of time. Here let us note that, proceeding though it did from a political reactionary, it is yet a manifesto of liberal rationalism. The famous epigram, "I have described the triumph of barbarism and religion," connotes not merely a history written in cold antagonism to religious belief but the first genuine attempt to describe Christianity as a sociological phenomenon; and if we should perhaps be kinder than Gibbon to the theologians and ecclesiastics upon whom he heaped contumely, no scholar will be found to dissent from his annihilating confutation of his religious critics. This rationalist philosophy of history, moreover, is accompanied by a sense of the continuity of history that was epoch making. No one had

seen before Gibbon that the Augustan empire fell only with the fall of Constantinople. Criticism has overthrown his attack on Byzantium; it has shown that, as in his chapters on Mohammedanism, he sometimes used untrustworthy sources. The answer to all such attacks is that he wrote before the nineteenth century, and that he made a large part of the achievement in method and outlook of the nineteenth century possible. He rescued a vital field of research from those who had made it the plaything of theological passion. He gave to that field both a new definition and a new perspective. With Voltaire he gave to the secular interpretation of history the letters of credit which assured to it its future empire.

VIII. For Catholic and Lutheran Europe the Reformation meant an autocratic and centralized state; and if the special experience of England and Holland required there different political institutions, nevertheless the economic ideology of Europe is, after the Reformation, different only in the varying degrees of its intensity. The decomposition of the mediaeval system, the rise of manufactures, the development of commerce, the new possibilities opened up by geographical discovery and the use of the mariners' compass, the growth of banking—all these meant, in their total and complex impact, the rise of national economic systems. It was inevitable that the state should seek to control this evolution. An increase of national wealth not only meant an increase of national power; it afforded a basis for taxation which fostered the political ends the state sought to serve. The history of economic policy before Adam Smith is thus very largely the history of a deliberate effort by the state to foster economic development. Burleigh's encouragement of maritime power in England, the relation, in Amsterdam, of the bank to the city council, the ordinance of Louis XIII permitting wholesale merchants to attain a patent of nobility—all these show clearly that the importance of the new industrial phenomena was clearly apparent to the mind of the government. The colonizing activities, the economic policies of Cromwell and Colbert, simply illustrate the same method in more intense form. The governments of the *ancien régime* became the patrons of capitalism as a means of promoting their own authority.

The conditions created by the Reformation inevitably sharpened this atmosphere. Catholic supremacy had meant the imposition of a social

and moral discipline which made ethical assumptions constantly conflict with everyday behavior. The true Christian life, in that view, was the life of the monk; and accumulation of wealth was hardly regarded as a praiseworthy ideal. Asceticism of this kind was obviously unfavorable to individual initiative. It left the average man in the grip of a dual view of the universe which contrasted worldly advantage with the religious ideal. Luther destroyed the dualism by making the internal voice of conscience the criterion of external conduct; as Sebastian Franck said, the monastic ideal became with him a world ideal. That was already an aid, since the voice of conscience is conveniently various in the precepts it adumbrates. It was Calvin more than any other thinker who provided the new capitalism with the ethic of which it had need. His view of man as the guardian of what God has given to him and his insistence upon occupation as a "calling," fulfilment of which is service to God, enabled the view to be justifiably taken that accumulation of wealth is a religious exercise, and that association with the business man in that task—the gospel of hard work and low pay—is an avenue of salvation. Calvinism, in a word, provided a way of transition from a society in which economic life was dominated by religious conceptions to one in which, with the growth of secular power, religious conceptions should be expelled from economic life. Not, indeed, until the threshold of the early nineteenth century was the evolution at all fully accomplished. But the basis of its coming is clearly present, once economic growth was made the basis upon which the national state was to wax strong.

Mercantilism is essentially the system which expresses, in its first large phase, the result of the decay in religious discipline which the Reformation marks. It is impossible to define it in a phrase. Rather it expresses a series of tendencies which in any given country exist in varying degrees of emphasis. The mercantilists were never a school, and they did not completely agree with themselves nor teach a consistent body of doctrine. In general it may be said that they were the proponents of four large principles. They insisted on the value of possessing a large supply of the precious metals. They preached the superiority of foreign trade over domestic and, as an almost necessary inference, of industries which manufacture from, over industries which supply, raw materials. They argued, finally, that the state

can by its deliberate policy artificially promote these desirable ends. Nor is it difficult to see why these views should have seemed desirable. To a generation which had seen the advent of a money economy, the virtual identification of wealth with bullion was natural enough. To one, further, which saw the rise of great centralized monarchies and an immense growth in the number of officials, a sense of the power of the state was inevitable. To the state itself industry seemed a natural field to foster, and the prohibition of imports a wise policy to pursue, since each led to an increase of revenue and thus an increase of the striking power of the nation. So, also, to use colonies as the reservoir of exports, to prohibit even them, so far as possible, from manufacture, was to strengthen national economic power. Mercantilism, so regarded, was a natural expression of the actual policy of the time. Traders urged it upon governments to protect themselves from foreign competition; and governments accepted it as the obvious path to the enhancement of their authority.

Mercantilist doctrine is, in fact, characteristic of any period in which liberal theories are at a discount. For liberalism tends to a cosmopolitan outlook, and the day for that standpoint had not yet come. The doctrinal expositions we have are essentially practical treatises intended for a particular state, and considering mainly some special and immediate national advantage. Thus the currency revolution effected by the discovery of the American silver mines led to a spate of treatises on money, some of them, like the *Réponse au M. Malesroit* of Bodin, very partially mercantilist in outlook. But in the *République* Bodin expresses the typical views of the system. He is strongly in favor of state intervention in industry, and eager for high duties on foreign imports. In England, almost simultaneously, the author of the *Briefve Concepte of English Policy* went further and actually proposed not merely the exclusion of all foreign goods capable of being made at home, but also a prohibition upon the export of raw materials abroad. Within thirty years Antonio Serra was striving, in his *Breve trattato*, to use the prosperity of Venice and the poverty of Naples as proof that the industrial state on mercantilist principle is definitely superior to the agricultural state.

The volume of this literature in the seventeenth century is enormous. In France Montchrétien has secured an enviable reputation for

his *Traité de l'économie politique* (1615) in which the name of the science appears for the first time; but the book is in fact a mass of wholesale and unacknowledged plagiarisms from Bodin and his own contemporary Laffemas. The need for colonies, the importance of government control, the danger of economic individualism, are all emphasized with enthusiasm. Thomas Mun in England did a similar work. Laying down with passion the thesis that the business of the state is so to arrange the balance of trade as to attract money from abroad, he indicated a host of expedients to this end. Mun is merely typical of a number of writers, like Misselden and Pollexfen, who urged the same views.

By the middle of the century, however, there are signs that faith in mercantilism is beginning to waver. The remark of Colbert that protection is a crutch with which the sound limb dispenses is well known. While Sir Josiah Child was a mercantilist upon colonies and the rate of interest, he did not object to the export of bullion, supported the Navigation Acts upon political rather than economic grounds, and saw that an import trade is the unavoidable result of foreign commerce. Charles Davenant, at the end of the century, while mercantilist upon colonial policy, went much further toward liberal ideas in other directions; and Sir William Petty, in this, as in much else, a mind of profound originality, laid down a body of doctrine which links him directly with Hume and Adam Smith. Indeed it may be said that by the end of the seventeenth century England possessed in Barbon, Dudley North and the anonymous author of the remarkable *Considerations on the East India Trade* (1701) an economic outlook which denied at their root all the fundamental mercantilist notions.

France, moreover, was tending in the same direction. The disastrous policy of Louis XIV resulted in a general economic impoverishment, and even in an age when criticism was dangerous, protest against mercantilism began to make itself heard. Boisguillebert was the ablest of the dissidents from the traditional form of mercantilism. In his emphasis on the importance of agriculture he combined what may be called an agrarian mercantilism with elements of a newer doctrine. While he believed in high import duties for the products of industry, he was specially concerned with the problem of improving the position of the agriculturist. He approved not only import duties on wheat but

also export bounties. He was freely cited by the physiocrats because of his insistence upon the primary importance of agriculture. But in fact his approach to the problems of economic policy was quite different from that of the physiocrats. Vauban's analysis, however, was built rather on social sympathy than upon economic insight. But he too has a profound sense that the mass of governmental regulation inhibits rather than promotes prosperity, and his proposed scheme of taxation would have wrought a revolution in the economic policy of the state. The fact, moreover, that a moral philosopher like Fénelon can urge the necessity of freedom of trade shows clearly that liberal ideas were gaining ground.

The reason is not far to seek. Industrial policy in the preceding age had been made subordinate to military policy; or, as with the suppression of the Edict of Nantes, to considerations which totally disregarded secular well-being. The zest for adventure was unsuccessful, and the economic theorists began, like those in matters of religion and politics, to look to freedom from governmental interference as the key to social good. Exactly, in other words, as experience of the state or church as an organ of repression led Voltaire and Diderot, Montesquieu and Holbach to look to religious toleration and political liberty as the ideal, so did the mistakes of the state as the arbiter of commercial destiny lead to an emphasis upon the desirability of *laissez-faire*. The movement did not come all at once. After Vauban and Boisguillebert there is a period of stagnation which lasted for almost thirty years; for men like Dutot and Melon were still set by the ancient ways, and Montesquieu, although an advocate of economic liberty, nowhere attempted systematic exposition in the economic field. It was not until the rise of the physiocratic school that a liberal policy was developed as a complete philosophy of economic life.

The originator of the physiocratic doctrine was Quesnay, the physician of the Pompadour; but the school of thought he may be said to have founded had wide ramifications. The elder Mirabeau, Mercier de la Rivière, Dupont de Nemours and Baudeau are only the most notable of the direct disciples; but Turgot and Condorcet were deeply influenced by them. Their power over public opinion was never great, and it may be said to have ended when Adam Smith embraced the most valuable part of their teaching in an outlook wider than theirs. But they were the first group of thinkers system-

atically to study economic problems in terms of liberal principles. They had, as Dupont said, "a body of doctrine defined and complete, which clearly lays down the natural rights of man, the natural order of society, and the natural laws most advantageous to men united in a society." Their starting point was the belief that there are natural laws underlying the social world as final and as real as the laws which explain the physical universe. These laws men must obey in order to secure the advantages of social organization. With their special economic doctrines, as with their insistence upon the value of benevolent despotism, we cannot here deal. What is important is their insistence that maximal production is the effect of the greatest possible liberty to trade. They object, accordingly, to all restrictions upon labor; and their defense of the individual's right to acquire property is, at bottom, an argument that interference with individual effort is an injury to national prosperity because in hindering ownership it removes the basic stimulus to production. Their view of society as essentially an aggregate of individuals, each of whom is not merely pursuing his own self-interest but is also the best judge of that self-interest, naturally led them to regard government as a necessary evil, whose interference should be limited to protecting the rights of one from invasion by another. The ideal government thus becomes that which has least concern with its citizens. Enlightened self-interest, in their view, was much more likely to result in social good than the system of minute regulation and hampering restriction. Obviously this outlook represents the deep distrust of men who had known mercantilism by grim experience. Their view of society was built upon the political and psychological considerations which made Locke the messenger of liberation to the eighteenth century. Their attitude to nature showed the impact upon them of the scientific revolution. For them reason can discover the laws of the social world, and no government can disregard the relentless operation of these laws.

They came in their due hour; though Germany still remained, with rare exceptions as at Baden, tied fast to the ancient ways. For in Germany economic theory was essentially a by-product of public administration and not an independent criticism of state policy. It arose out of the teaching of economics to men who were to devote their lives to some form of administrative effort. The cameralist tradition,

as it is called, was thus inevitably an effort to clarify, and not to criticize, the work of government. The professors of economics were themselves civil servants, holding chairs founded to enable them to offer practical instruction. The result is a body of ideas intended especially to explain how administration can be best conducted to the best advantage. Such men could hardly be expected to belittle the sphere of the state; they were concerned with practical questions of tariffs, taxation, forestry, mining. Mercantilism naturally expressed the categories of thought they required; and all the leading German cameralists of the seventeenth century accepted, like Bornitz and Schröder, the traditional doctrine. Nor does the eighteenth century see much change. Justi and Justus Möser were unaffected by the new ideas; and though Zincke and Sonnenfels show gleams of a fitful temper, their order of thought was hardly in advance of that of Davenant or Melon. The dominant school was made by the physiocrats and their allies. They showed that the individualism which the Reformation portended had at least extended its empire to the economic sphere. Hutcheson and Hume, the physiocrats and Adam Smith, when they propounded the system of natural liberty, were only completing the triumph of that critical rationalism which was born of the revolutionary experience of the sixteenth century.

For it may be said without exaggeration that after the eighteenth century the policy of the

state is above all distinguished by the subordination of its power to industrial need. The recognition is consequent that the commercial life of the nation is the supreme manifestation of its activity. The central theme of political policy thus became the supply of what commercial life required for its full expansion; and to this all effort in the community was increasingly subordinate. The religious discipline to which the individual had been formerly subject could then be replaced by an ethic derived predominantly from economic circumstance. The source of social regulation was no longer supernatural authority but rational utility. The system of natural liberty, moreover, was discovered to result in a harmony of interest between all members of society. This gave to liberalism the character of a doctrine entitled to optimism because, since the individual was thus simply able to realize himself most fully, no limits need be set to the bounds of progress. Laissez-faire as a program was the logical counterpart in social philosophy of Protestantism in the religious, of free inquiry in the intellectual, sphere. Each came as a herald of freedom to an age hampered by obsolete principle. Each definitely enlarged by its victory the area in which the human spirit was free to voyage in self-discovery. But each in its adventure was to find that the abolition of unnecessary social restraint was not identical with the creation of necessary social control.

HAROLD J. LASKI

VIII

The Revolutions

I. It is perhaps a fallacy to consider the revolutions of the latter half of the eighteenth century, the American, the French and the industrial, as manifestations of a common revolutionary spirit working to lay the foundations of modern society. Certainly the changes brought about in these years were complex enough, and sufficiently dependent on earlier changes, to make the historian cautious. Moreover the example of the eighteenth century writers themselves must serve as a warning against too inclusive generalizations. Yet there does seem to be in the western world at this time a very definite *Zeitgeist*, a common attitude distinguishable both in thought and in action. Saint-Just gave this attitude profounder expression than he doubtless knew when he told the Convention, "le bonheur est une idée neuve en Europe." Happiness for everyone was attainable, not in some distant heaven, but here and now on this earth. If old habits, old beliefs, old institutions stood in the way of this happiness for the common man they must be altered. One cannot look into the files of an eighteenth century magazine, or study the life of an eighteenth century man, without becoming aware of this acceptance of innovation. Experiment, in fact as in idea so foreign to the Middle Ages, had by the eighteenth century become a commonplace.

This change appears most obviously in what we may call the revolution in things. It was prepared by the remarkable progress of the physical sciences. Newtonian physics were brought by Voltaire to the level of the *salon*, and very ordinary men came to see the material universe ruled not by mysterious divine laws but by discoverable natural laws. These laws were, it is true, immutable; but once discovered, man had but to adapt himself to them to find himself perfectly at ease with his environment. Moreover was it not obvious that man, too, was a part of the material universe? Much of eighteenth century work in the social sciences is an endeavor to find for human society laws of nature, not in the sense Grotius gave the phrase, but in the sense Newton gave it. Both physics and chemistry progressed throughout

the century by the work of careful investigators, and toward the close of the century Lavoisier gave to chemistry its modern form. The biological sciences did not attain the same completeness; but even here the work of so typical a man as Buffon is very important. For Buffon, although he was hardly a biologist in the modern sense, did help enormously to popularize the study of "natural history"; and from that study there emerged a clearly evolutionary concept of organic life, and a geology which Buffon himself had difficulty in reconciling with the book of *Genesis*. Academies and the learned societies increased their scientific activities, and all sorts of men busied themselves with scientific experimentation, and sometimes made valuable discoveries. Franklin, of course, comes to mind at once.

Franklin was not only a scientist but an inventor. His work is an example of the utilitarian purposes to which these studies were turned. Invention was a necessary element in the industrial revolution, and the work of Arkwright, Watt, Cartwright and other English inventors helped to determine the rise of manufacturing in England. Yet this familiar role of invention in the English industrial revolution is of less importance in the study of eighteenth century thought in the social sciences than is often assumed. The middle class in France and in England did indeed furnish most of the writers on social questions, and determined the nature of their thought; but this middle class had been enriched not by the industrial revolution, which had just begun, but by the earlier development of commerce. The literature of protest against the conditions brought about by the industrial revolution grew up much later, and began rather in France, where the industrial revolution was late, than in England, which was very early industrialized. The real importance of mechanical inventions in a study of the social sciences in the eighteenth century lies rather in their psychological than in their industrial effects.

For these inventions, applied to a host of domestic purposes, helped to give to the average

man something of the modern attitude that nature exists to be conquered. In 1783 the brothers Montgolfier sent their first balloon aloft, and two years later Pilâtre de Rozier achieved a very modern death attempting to cross the English channel in the air. In less spectacular ways land travel was speeded up enormously through improvement in road making, in coach building and in the organization of posts. Agricultural methods were improved, and household conveniences increased. In fact the eighteenth century was quite sure that it had already attained a state far ahead of previous ages. The carping conservative existed, of course, as he always has, but the feeling was quite general that man is a creature of great possibilities and that there is no limit to his ability to improve the conditions of human life on this planet. The idea of progress, discernible clearly enough in seventeenth century writers like Descartes and Bosquet, is fully developed in a host of eighteenth century writers such as Turgot, Rousseau, Condorcet and Adam Smith. The idea is even given a biological application in Lamarck's theory of evolution, where the will does wonders with environment. Need it be pointed out how far this perfectible man is from the fallen man of Christian tradition?

From improvement in material environment it is an easy step to improvement in political and social environment. The revolution in institutions was no less marked than the revolution in things. The characteristic form of this revolution up to the very end of our period, however, was not popular but autocratic. Most of the writers with whom we are concerned lived under a benevolent despotism. Frederick the Great, Catherine and Joseph II are stock examples, but George III and Louis XVI, each in his own way, were trying hard to be benevolent despots. Voltaire, for all his humanitarian enthusiasms, could hardly conceive any effective agency for reform other than a wise ruler. Modern knowledge made possible great improvements in the condition of the people, but the people themselves were too ignorant or too selfish to take the philosophic view, and reforms must be made from above. The king was no longer to rule by divine, but by philosophic, right.

Benevolent despotism, however, could not long contain the reforming spirit of the age. Too much, for one thing, depended on the personality of the despot, and the supply of

despots was irregular. Moreover in France and in England the well-intentioned efforts of the crown met from the start with an organized opposition supported by what may be called the popular party. Reforms were usually made piecemeal, and often disturbed established interests without pleasing those supposed to benefit from the reforms. The career of Turgot in France shows how uncertain a reforming monarchy could be. Finally these reforms were essentially paternalistic, and gave insufficient outlet for the energies of the rising middle class.

That class was now in most of western Europe thoroughly prepared to fend for itself. For generations it had been growing richer. Less tempted than the nobles to spend money on mere luxuries and often indeed forced into plain living by Calvinist or Jansenist principles, the middle class had profited by the expansion of trade to secure a position of economic power more advantageous in many ways than that of the old landed nobility. And following what seems to be a law of politics, it was seeking to gain a political power corresponding to its economic power. With increasing wealth came also increasing opportunities for education. Pedagogy itself, in spite of Rousseau and Pestalozzi, made little progress in the eighteenth century. Most middle class boys received a thorough classical training, which later bore fruit in a host of revolutionary Brutuses and Mucius Scaevolus. What was really important, however, was the opportunity for a continuous adult education afforded by the great increase in newspapers, periodicals, lending libraries and reading clubs. Much of the literature of the time, from Defoe, the English essayists and their French and German imitators on to the encyclopaedists, is written for the middle classes and, if the Marxian implications of the phrase can be forgiven, is definitely class conscious. In a hundred plays and novels the besotted and vicious nobleman is outwitted by the virtuous commoner.

In the American and French Revolutions the middle class achieved political power. In England the revolution began with Wilkes and Middlesex, though it did not translate itself into institutions until 1832; yet the slowness of the change ought not to blind us to its reality. England, like the rest of the western world, underwent a political revolution in the eighteenth century. Fashions in historical writing have occasionally obscured the fact that the American Revolution was a social revolution as

well as a civil war. Certainly, however conservative a Hancock or a Washington may have been, the repercussion of the American Revolution in Europe had anything but conservative results. The French Revolution, however, remains the pattern of the modern democratic movement, and the focus of the ideas with which the middle class began its rule. A republican form of government, universal suffrage, equality before the law, universal education, abolition of government and other monopolies in trade, and the career open to talents—these, if not actually realized, were all a part of the program of the first French Republic. "Liberty, Equality, Fraternity," became a symbol in which the more idealistic aspirations of the people could be centered; patriotism became a fact which satisfied their more practical aspirations. Modern democracy had found its institutions.

The revolution in ideas is no less real than the revolution in things and the revolution in institutions. The textbooks have labeled this movement the rise of romanticism. Now there is no great objection to assigning to the word romanticism ethical and philosophical implications which cover the whole field of human thought, although clearer thinking might have resulted from limiting the word to aesthetics. But granted that romanticism is an attitude toward life, it was surely not the attitude of all the revolutionists. What was really new in late eighteenth century thought was an extraordinary blend of rationalism and romanticism. Rationalism employed the methods of logic, refined and improved by generations of thinkers, to demonstrate the weaknesses of existing institutions, and to construct in theory institutions without weaknesses. Romanticism brought to these theories a faith and an animal energy without which they could hardly have moved men to action. Romanticism in the age of revolutions was thus the complement of rationalism. The calculating Bentham and the mystic Wordsworth are both revolutionists; and sometimes, as with Rousseau, who wrote not only the *Nouvelle Héloïse* but also the *Contrat social*, the same man is both romanticist and rationalist. The two attitudes were soon to part company in the history of thought; romanticism, finding more emotional satisfaction in ancient irregularity than in modern uniformity, was on the whole to turn conservative, while rationalism, newly christened utilitarianism, was to continue on the side of the innovators. But the point for us to

notice is that in the latter half of the eighteenth century the rationalist temper, seeking to translate into life the orderliness of the thought process, and the romantic temper, seeking an ecstasy beyond thought and sometimes beyond life, did collaborate in the attack on the *ancien régime*.

In such a historical setting it is not surprising that what we now call the social sciences should have attracted active minds. There seem to be good reasons for believing that in the latter part of the eighteenth century more intellectual energy was spent on the problems of man in society, in proportion to other possible concerns of the human mind, than at any other time in history. Such a statement is perhaps an exaggeration, and certainly is not susceptible of proof; but it ought to focus attention on the extraordinary place occupied by the social sciences in the life of the time. Hardly anyone seems free from sociological preoccupations. French literature is almost too perfect an example. It is hardly possible to find among French writers between 1750 and the revolution one who, like Villon, like Ronsard, like Racine, has wholly an artist's interest in his fellow men. Any literary form could be adapted to the purposes of the reformers. The public found political allusions in Voltaire's very classic dramas; moralists took over the novel, cleansed it of its picaresque impurities, and used it to persuade men to social virtue; and lyric poetry, which seemed of little use to the sociologist, was abandoned. The difference between pure literature and literature inspired by social purpose will be very clear from the slightest comparison of a work like Longus' *Daphnis and Chloë*, which is a real idyl, and Bernardin de Saint-Pierre's *Paul et Virginie*, which is propaganda in favor of the state of nature. But English literature is hardly behind the French in its preoccupation with the problems of man in society. Gray is almost alone in his elegiac indifference to so light and necessary an evil as politics. You may extract bits of Rousseau from *Tom Jones*; and as the century goes on, lesser novelists like Bage, Holcroft and Mrs. Inchbald are nothing but propagandists; Johnson was a moralist and a Tory, and certainly wrote no pure literature. In Germany literature from Gleim and Gellert to the young Schiller, though its main concern may be to nourish intensity of feeling, is certainly more moralistic in tone than lyrical.

The point we have made as to literature, that

it kept branching out into the social sciences, could be made in the same way about other fields of human activity. A few names will have to suffice: Frederick the Great, chiefly a king, but also a *philosophe* and author of an *Anti-Machiavel*; Turgot, civil servant and economist; Mirabeau, great lord and economist; d'Alembert, mathematician and moralist; Tucker and Price, clergymen both, the first an economist, the second a political philosopher; Priestley, chemist and political philosopher; Franklin, merchant, scientist, inventor and philosopher; Burke, at once a politician and a great political thinker—perhaps the most surprising combination of all. So far indeed did this invasion of other fields of thought by the social sciences go in France that the word *philosophe*—a word on everyone's lips at the time—though it can hardly be translated into modern French, is probably most nearly rendered *sociologue*.

Whether this extraordinary flowering of the social sciences came about through the revolutionary tendencies of the age, or whether these revolutionary tendencies came about through the flowering of the social sciences, are questions that can be finally answered by faith alone. But it may be pointed out that both the advancement of the physical sciences and the rise of the middle class determined, if not the existence of the social sciences, at least their character and development. The human intellect had mastered astronomy, physics and chemistry by discovering the uniformities or laws behind the apparent diversities of nature. What more natural than to attempt by the same means to discover the laws of politics or economics? Then, with the growth of the middle class in wealth and in education, there came an inevitable increase in interest in man as a social and political animal. For the middle class was too large to gain its experience of politics directly by personal contact, by struggle and intrigue. It was obliged to learn indirectly from books. Moreover it could not act as a body from direct knowledge, nor could it cohere, as could any oligarchy, through the intimate relations between its members. The middle class had to learn its politics from the printed page and the lecture platform; and its politics, in order to be workable, had to be translated into theories, symbols, a ritual. Finally, since fashion is hardly less influential in intellectual than in other human activities, once men of reputation got to writing on social and political

matters others took it up. The French *salon* proved peculiarly adaptable to serious discussions about the natural goodness of man, the corrupting influence of bad governments, the relative virtues of monarchy, aristocracy and democracy and similar topics. There is no doubt that the social sciences were enjoying a boom.

Three general remarks may be made about the vast body of writings resulting from this interest in the social sciences: it is predominantly French; it is almost always politically partisan; it is comparatively undifferentiated as between separate branches of the study of man in society.

Great Britain contributed much to all the social sciences in the period, and economics is not too unjustly called in origin a British science. Yet France possessed in the eighteenth century a reputation as the center of thought and fashion which she has since lost, but which no single nation has acquired. Even English thought was spread largely through the western world in French translation or in French adaptation. The social sciences were cosmopolitan enough both in the origins and in the outlook of the men who studied them; but that cosmopolitanism has a tinge as definitely French as the manners and the clothes of the time.

Much of the political writing of the period is frankly polemical, even when it appeals to general principles, as with Voltaire; but even where the writer protests his dependence on the law of nature or on scientific principles, political purpose comes out clearly enough. A Hume may indeed maintain a skepticism about the customary explanations of the origins and continuance of civil society; but his philosophical skepticism only leaves him the freer to insinuate conservative preferences in practical matters. Most of the writers of the time, however, are definitely on the side of innovation. The *philosophes* in France were accused by their enemies of being a sect, and at the very least they were a political party of advanced views. English economics was revolutionary enough in its attitude to certain established institutions. In fact Burke is almost the only genuine conservative among the great political thinkers of the period.

What is most surprising to the student of today in eighteenth century social science is its lack of differentiation into fields—political theory, jurisprudence, sociology, social psychology, anthropology and so on. This may appear at first to denote a surprising versatility

in individual writers. Condillac is a psychologist and also an economist; Adam Smith is an economist and holds a chair in moral philosophy; Montesquieu is jurist, historian and sociologist; Rousseau an educational psychologist, a political theorist, even a bit of a theologian. But the difficulty goes beyond individual versatility to the works themselves. Just how is *De l'esprit des lois* to be classified? or *Dei delitti e delle pene* (which is obviously too humanitarian to be strict jurisprudence) or Raynal's *Histoire des Indes* (which is hardly history at all)? The fact is simply that specialization in the social sciences had not yet set in, and that we shall have to bear this in mind in judging what the late eighteenth century contributed in this field. And for the purposes of a brief review of the leading writers we shall have to employ a very simple classification: first, political writers, a necessary catch-all term to cover the very undifferentiated nature of the field; second, economists, a fairly definite group of men; third, historians, who again are pretty well earmarked as such.

Montesquieu's *Esprit des lois* (1748) is the natural point of departure for a study of the political writers of the age of revolutions. It quickly attained enormous prestige, it obviously had an influence on political action, especially through its emphasis on the doctrine of the separation of powers, and it remains today a political classic. What seems to us now its chief virtue is its attempt to explain existing laws in terms of the whole of human life. Montesquieu finds in any given state a set of laws; these laws have, he believes, been brought into being by the complex play of natural causes—the size of the country, its climate, the religious beliefs of the people, their wealth, their commerce, their morals, their political constitution. By a careful study, then, of these observable facts in the social life of a people he hopes to be able to show how their laws are adapted to their character and circumstances. Once he has succeeded in showing how this adaptation came about, he is in a position to suggest ways of making it more perfect, of providing for a given people a better set of laws. But he will not make the mistake of spinning out of his own brain an ideally perfect set of laws, suited to all times and to all places. By going to facts instead of to philosophy, he has become convinced that all legal systems are relative to particular, and varying, conditions of life. Although there is implicit in it a kind of

historical fatalism, the *Esprit des lois* none the less approaches the study of law from the point of view of the sociologist, the psychologist and the historian; its method is essentially inductive. In these ways it is still a very modern book.

But Montesquieu had the greatest success with his contemporaries at precisely the points where he seems false to his method. No scientist of course believes that facts take care of themselves, even in induction. But in true induction hypotheses seem to grow out of a collaboration between observed facts and the mind of the observer. Montesquieu's famous classification of governments, which fills the first eight books of his work, shows evidence of a desire to fit facts into categories arrived at *a priori*, often for purposes of propaganda. There are three forms of government, republican, monarchical and despotic, which have respectively as principles virtue, honor and fear. Now this is inferior, both as to observation and as to logic, to Aristotle's famous classification. Moreover a despotism is merely a kind, even though a bad kind, of monarchy; Montesquieu is here clearly inspired by a partisan zeal to show Frenchmen the horrors of despotism and to prevent the French monarchy from turning despotic. He is, in short, being politically partisan. The well-known analysis of the English constitution, the principle of the balance of the three powers, executive, legislative and judicial, and the virtues of a mixed government, where king, nobles and people also contrive to effect a balance of power, is another example of Montesquieu's failure to avoid stiff, absolute, *a priori* categories. This part of his work came to reinforce Locke, and the two together have been tremendously influential; yet the modern social scientist will see in this rather an attempt to mold facts to a theory than a true induction. That the theory, in spite of its incompleteness, should have proved fruitful both in practical politics and in political thought need not surprise us. The eighteenth century had a way of jumping at conclusions and then acting upon them. But the importance thus given to the conclusions forced critics to a renewed and more careful study of the problem. The history of the doctrine of the separation of powers in the United States is a case in point.

The political thought of Voltaire is scattered throughout his vast work, in his histories, his *Dictionnaire philosophique*, his satires and his correspondence. He never wrote a systematic

treatise on government, and it is idle to seek to found an orderly system upon his "chaos d'idées claires." But his influence at the time was so great that the historian of opinion cannot neglect him. He is the great theorist of the benevolent despots. He has no faith in the common man, and is neither emotionally nor intellectually affiliated with the democratic movement. Yet he did in practise become its ally and, after his death, one of its patrons. Voltaire helped the democratic cause and incidentally the growth of the social sciences, first, by his steady opposition to intolerance and bigotry, second, by his willingness to criticize any established institution in the light of reason, and finally, by his admiration for the liberal elements in the English constitution. He is particularly important as one of the chief sources of inspiration for the anticlerical movement which has since played such an important role in European politics.

Rousseau is the third of the triumvirate upon which writers have often thrust responsibility for the French Revolution. The *Contrat social* (1764), though it no doubt served as a handbook for revolutionists, is as much a permanent addition to political thought as the *Esprit des lois*. The common criticism that men never did at any moment in history get together and sign a social contract is of course absurd. Rousseau never thought they did. The *Contrat social* is an unusually penetrating attempt to answer a fundamental question in political psychology: Why do men accept the authority of society? Rousseau employs what is after all only a figurative expression—the contract—to explain that in the long run men do what a given society wants them to do because by an act of faith they have identified their individual wills with the will of the society. Rousseau probably did think of this general will of society in metaphysical terms, as partaking of the reality which the Platonist assigns to universals. But the empiricist may well accept much of his analysis. For whether the group, and hence the group-will (general will), be real or not, the individual in his relationship to the laws and to the rulers of a group does almost always personify, or even deify, the group, and hence puts his obedience, even though unconsciously, on a religious basis. A man will accept willingly the constraints set upon him by society because he feels these constraints are set by a superior and a better will which is yet somehow the expression of something within him. At bottom

the psychology of obedience to civil authority is the same as the psychology of obedience to religious authority.

The revolutionists, of course, found much more than this in the work of Rousseau. The general will came, at least in popular opinion, to be identified with the will of the majority, a confusion against which Rousseau himself had carefully guarded. Much of the phraseology of the *Contrat social*, like the famous sentence "L'homme est né libre, et partout il est dans les fers," lent itself to the uses of political radicalism. A great deal of what Rousseau had taken pains to show could apply only to the small city-states of antiquity and to their direct democracy was given a modern application. The most revolutionary of Rousseau's doctrines, however, that of the natural goodness of man, is not to be found in the *Contrat social* but in the *Discours sur l'origine de l'inégalité parmi les hommes* (1753), the *Nouvelle Héloïse* (1760) and the *Emile* (1762). Man, regarded simply as a creature of animal appetites and passions, is essentially good. If these appetites and passions now waste themselves in corruption, it is because civilization, with its laws, its institutions, its religions, its arts and sciences, has turned them into evil ways. Even the much praised master faculty of man, his reason, has aided in leading him astray. His heart is his one true guide. Rousseau, though he did not originate this doctrine, is clearly in the eighteenth century the center from which it spread. It became in the hands of some of his successors a thoroughgoing denial of the value of thought and an exaltation of the value of feeling, and as such is the leading theme of the romantic movement. Its political consequences are clear and important. In its mildest form it is merely a belief in the rightness of the plain people, and hence in the ordinary machinery of democracy; for the common people are less corrupted by manners, education and luxury, and hence are nearer nature. In its extreme form it amounts to anarchy. For if men's instincts, pure and uninfluenced by civilized corruption, are good, then we must trust each man to follow his own instincts, and not corset him with unnecessary and vicious laws. Moreover the doctrine of natural goodness brought support to egalitarianism. Goodness is in the natural man a matter of feeling; but men obviously differ less, even in the light of nature, in their capacity for feeling than in their physical and intellectual capacities. Equality in this sense seems almost a fact.

Rousseau's doctrine of the natural goodness of man led him toward individualism; his doctrine of the social contract, whereby the individual submerges his will in the general will, led him toward collectivism. He never seems quite able to choose definitely between these alternatives. In the same chapter of the *Contrat social* (bk. ii, ch. iv) he says that the social pact gives the body politic absolute power over all its members, but that individuals possess natural rights which they must enjoy as men; that though each citizen under the pact alienates all his powers, goods and liberty to the community, he alienates only the part of these which concerns the community; that, however, the sovereign is the sole judge as to what concerns the community. He probably leans somewhat to collectivism. Both collectivists and individualists appealed to his work for support, but on the whole his practical influence has been in favor of collectivism (the Jacobins, early socialism).

Most of the men commonly grouped together as the *encyclopédistes* wrote a great deal on social problems, although the great encyclopaedia itself does not devote much space to the social sciences. Although these men gave personal interpretations of their own to many questions, they none the less stood together on important issues, and it will not be unfair to select one of them for special treatment. Holbach's *Système social* (1773) is a work obviously inferior to those we have hitherto considered. It is full of bad rhetoric and special pleading and raises far more problems than it attempts to solve; or rather it solves them with a phrase, "let reason rule." Holbach starts with a definitely utilitarian psychology. Man is neither bad nor good; he is born with an instinct to seek pleasure and avoid pain. If he is allowed to follow these instincts, that is, to pursue enlightened self-interest, he will so act that his own pleasures, and therefore those of his fellow men, are maximized. The science of politics is simply the application in society of this simple moral principle.

Society is based on a social pact, actual or assumed. Holbach is not quite sure as to who are the parties to this contract. At first it is a contract between individuals to make a society; then it becomes a contract between the individuals governed and the government, or sovereign, set up by the previous contract. But in both cases Holbach retains the Lockian idea that the individual promises obedience,

and society or the government promises protection of property and liberty, and that where this protection fails the contract is broken and the individual absolved from obedience. In the state so set up the form of government does not matter, and the old dispute as to the respective virtues of monarchy, aristocracy and democracy is an idle one. In the past they have all three proved bad, anyway. What does matter is that the civil laws of these states should correspond to natural laws, and that men should obey not other men but the law. This law of nature, about which there has been so much vain dispute, is very simple; it is simply the psychological law of enlightened self-interest. If men are properly brought up they will follow this law and, one would think Holbach obliged to conclude, will not need any government.

He does not, of course, so conclude, for he was hardly a logician. When he does abandon rhetoric for something like a concrete program, he is far from iconoclastic. Men have in the past always been the dupes of their vicious rulers; history is a long record of crimes and failures. Holbach, like all his fellows, attacks monarchy under the name of despotism. But he is no great admirer of the English constitution; the balance of powers is a balance of selfishness. Indeed in the latter eighteenth century French admiration for the English constitution was vastly lessened by the attack of the rationalist *philosophes* and by heightened national self-consciousness. Some form of popular government is desirable, but Holbach hastens to make clear that he does not mean that the ignorant and irresponsible masses should have political power, but only the merchant, the artisan, the professional man. Here again there comes in the class consciousness of the bourgeoisie. He leans toward individual liberty, even to laissez-faire, for the individual best knows his own interest. The book concludes with a reversion to the idea of the benevolent despot, and an exhortation to princes to let the light of reason prevail.

It should be clear that much of this radical thinking about nature, the rights of man, and the evils of monarchy touches doctrines we now call socialistic. Indeed Montesquieu himself writes that "the state owes to every citizen an assured subsistence, proper nourishment, suitable clothing and a kind of life not incompatible with health" (*Esprit des lois*, bk. xxiii, ch. xxix). Rousseau in the *Discours sur l'inégalité* blames private property for the fall from the state of nature, although in the *Contrat social* he

accepts it as necessary in the modern world. Yet the great political writers of the century do not in the main attack the institution of property; and the socialism to be found often enough in the work of lesser men is moralistic and utopian. There was as yet no large urban proletariat in France, no factory system, no proletarian class consciousness. Therefore there was no driving force behind socialistic ideas. That these ideas, in content essentially the same as socialistic ideas in the nineteenth century, should have cropped up in an environment apparently unsuited to them, makes an interesting problem in the relationship of political speculation to political practise. Here, apparently, ideas feed upon ideas, instead of upon social and economic necessity.

Since one must single out one of these socialistic writers for further analysis, it will be well to take Morelly, so little known in his own time that his chief work was attributed to Diderot, but since acknowledged by socialists as one of the founders of their faith. The *Code de la nature* (1755) constructs from the true principles of morals an ideal society. Man is gifted with so many varied desires, and nature herself is so generous, that if the fruits of this earth were not monopolized by the few through the institution of property, everyone could always have what he wanted. If someone had already eaten up the peaches, the hungry man could turn to the pears. In the state of nature these idyllic conditions obtained, but the first law givers permitted private property and gradually all existing evils grew up. Man, at bottom good, has been corrupted by institutions. Morelly next draws up a code to restore the state of nature, though it is not clear how men are to be made to accept the code; he admits the code could not be accepted in his own day.

This ideal constitution has three fundamental laws: there is to be no private property save in objects of personal use; each citizen is supported by the state; each citizen will labor for the state according to his strength, his talents and his age. There are in addition an elaborate territorial and family organization on a decimal system, provisions for public buildings and city planning, and a scheme for education and police. The whole suggests Fourier's idea of the *phalanstère*, but Morelly lacks completely the psychological subtlety of Fourier. What is particularly interesting in the *Code*, however, is a whole section (pt. ii) in which Morelly tries to find a basis in

fact for his theories. Community of property, far from being a mere deduction from abstract principles, is, he says, a historical fact. Primitive communities did not have private property, and in our own day the Red Indians show how a people can pursue agriculture under a tribal community of goods. Early legislators corrupted European nations by codes of laws which permitted inequality; the best and most socialistic of these early codes, that of Lycurgus, was precisely the one that lasted longest. This appeal to experience may seem to us rather inadequate; but the important thing is that Morelly felt obliged to make it.

Almost all the currents of political speculation in eighteenth century France converge in Jacobinism; yet because Jacobinism was the creed of a political party and hence translated into action, and because its leaders formulated their ideas chiefly under the pressure of parliamentary necessity, historians of political thought have left the subject to general historians like Taine or Aulard, who are perpetually attacking or defending the party instead of analyzing the creed as objectively as possible. Now Jacobinism as a form of political philosophy, though composed of elements familiar to the student of eighteenth century thought, is, like all true compounds, a new element, and not to be understood as a mere sum of its parts. This philosophy is best sought in the writings and speeches of such leaders as Robespierre and Saint-Just. Rousseau's concepts of the general will, the social compact, the rule of virtue have been transformed into a democratic ritual. The metaphysical rights of man become the Declaration of the Rights of Man and are incorporated into the French constitution, where they promise protection to property, freedom of speech and other tangible things. The revolutionary government, said Robespierre, is "the tyranny of liberty against despotism." The opponents of the Jacobins are wrong, and one cannot be free to do wrong. To guillotine them is to prevent them from doing wrong—that is, in a sense, to free them. The general will is not the will of all, but the will of all who possess virtue—in theological terms, all who are in a state of grace. The external signs of this state of grace are outlined by Robespierre and Saint-Just: the unified nation state; a republican form of government; public worship of the Supreme Being; obligation of all to serve the state, particularly in war; simplicity and decency of manners; the absence of extremes of wealth and poverty, but with private property

and private commercial enterprises; universal education and hence universal suffrage, save of course for non-Jacobins. Robespierre's own standards of conduct were far too puritanical to have been applicable to French life, even had his political methods been wiser, and the failure of the Jacobin republic was inevitable. But the essential ideas of Jacobinism have influenced French and even other governments ever since.

All the representatives of French political thought just considered were hostile to the established order. Political thought in England, where political issues could be fought out in Parliament instead of in the press, and where social issues seemed less serious than in France, was less one-sided. Conservatives like Blackstone and Johnson were even more read than radicals like Price and Priestley. Those who are fond of distinguishing national differences will easily find other ways in which English political thought of the period had characteristics of its own. In method, however, there is little difference between eighteenth century French and English political thinkers. Both schools, indeed, went about the study of the social sciences in much the same way—a fact to which we shall later return.

David Hume was in politics a conservative; he was, however, a rationalist and a polite anticlerical. Had he been born a French citizen, circumstances might have overcome his temperament and made him a reformer like his friends the *philosophes*. But in England fashion was not unkind to conservatives. He never produced a systematic treatise on politics, but his *Political Discourses* (1752) contain some very interesting speculations. He thinks that politics may be reduced to a science, and a mathematical science at that. But the sort of scientific laws of politics his study afforded him may be judged from this one: "That an hereditary prince, a nobility without vassals, and a people voting by their representatives, form the best monarchy, aristocracy and democracy" ("That Politics may be Reduced to a Science" in *Essays Moral and Political*); and in another essay ("Of Civil Liberty") he admits that, even were the art of reasoning more perfect than it is, our paltry three thousand years of history do not provide us with enough materials to make scientific conclusions.

Hume points out how in his England each party has built up a philosophical system "to protect and cover that scheme of actions, which it pursues" ("Of the Original Contract" in

Essays Moral and Political)—an anticipation of the modern psychologists' "rationalization." He attacks both the social contract, which he says is ridiculous if, as with Locke, it pretends that all government at all times depends on the voluntary consent of the governed, and the divine right of kings, which he shows can mean only that the divine power has instituted kings as it has instituted constables, and that therefore the authority of both king and constable is equally divine. We have finally left as an explanation of why men obey in civil society only mere custom or habit, which is to say little more than that men obey because they obey. Hume's politics, in spite of scattered aphorisms which are often very penetrating, is as bankrupt as his epistemology. He did, indeed, construct an ideal state ("Idea of a Perfect Commonwealth" in *Political Discourses*), which he would not establish by any violent means but which he is so sure is in accordance with the laws of politics that once established it ought to prove as near immortal as anything in this world can be. Yet even where Hume appears most abstract and rationalist, he is often, like so many eighteenth century writers, curiously near to facts. He proposes, for instance, a "court of competitors," composed of defeated candidates for his senate who shall have polled one-third or more of the votes of their constituencies, and gives this court power to criticize and impeach senators. We must remember that Hume wrote in the infancy of the party system, when most publicists considered parties as troublesome factions. He has gropingly seized the idea of "His Majesty's Opposition."

Of the school of writers who defended the English constitution as the best type of government actually realizable, the Genevan Delolme will serve as the best example. His *Constitution of England* (1775) was for a long time almost as popular in England as Blackstone's *Commentaries*, and illustrates the essentially conservative, if Whiggish, view that the eighteenth century compromise in English government deserved to stand as a pattern for the political efforts of mankind. Delolme starts with the important assumption that "it is upon the passions of mankind, that is, upon causes which are unalterable, that the action of the various parts of a state depends" (introduction). His book is an elaborate, and often acute, analysis of the machinery of the English government seen as an elaborate device for neutralizing the evil passions of men by a system of checks and

balances which allow the good passions as free play as possible. He sees the great part the lessons of experience have played in English politics, and insists that experience, not abstract reason, must be our guide in such matters. But though he claims to follow English lawyers and derive his "rights of Englishmen" empirically (bk. i, ch. iv), it is hard to distinguish these rights as he formulates them from the celebrated rights of abstract man. What is most interesting in De Lolme's work is his complete failure to see the real significance of the facts he has carefully observed. The party system, the true nature of the royal prerogative, the union of "executive" and "legislative" powers in the cabinet, all escape him. Writing at the time of the Wilkes case and the quarrel with America, he could describe the English political system as perfectly adjusted, and could completely ignore the symptoms of grave social unrest evident in the rise of Methodism. These errors, like so many similar errors in eighteenth century political thought, lie not in a wilful ignorance of facts, but in a preconceived and dogmatically maintained interpretation of the facts.

Jeremy Bentham, in spite of his radicalism, appears as a thoroughly British political thinker, presumably because he attacked with violence the concepts of natural rights and social contract appealed to by the French revolutionists. His first work, the *Fragment on Government* (1776), however, exposes these fallacies in the work of a countryman, Blackstone. *The Principles of Morals and Legislation* (1789) is a working out in these fields of the great principle of utility, already announced in the previous work. Bentham's most active period of political writing lies in the nineteenth century; but though his radicalism on political questions increases with age, his methods of thinking do not change.

Men, for Bentham, seek pleasure and avoid pain. A careful observer, studying the actual physiological and psychological effects of the various forms of pleasure on man, can rank these pleasures in a sort of hierarchy and then, with the aid of mathematics, devise a scheme of human life whereby the maximum number of men would enjoy the maximum amount of pleasure. Existing institutions can be subjected to criticism by comparing them with this scheme of things; the critic can discover just wherein society now fails to provide the greatest good of the greatest number.

This principle of the greatest good of the greatest number, explicit in Bentham, is implicit

in most of the other utilitarians of the time—Paley, Butler, Hume, Holbach. Bentham, however, pursued into all manner of fields—criminology, jurisprudence, constitutional law, economics, education—the guiding principle of utility. In many of them his work has been very fertile in practical results. Yet curiously so wise a guide as utility led to the same goal as that most foolish of guides, natural rights. Bentham's program was much the same as that of the French revolutionists—a republic, universal manhood suffrage, annual parliaments, abolition of the House of Lords, the ballot, codification of the law, secular education and freedom of speech and trade. The explanation of this coincidence is partly that the defenders of natural rights maintained that these were rights to pursue happiness and avoid pain without diminishing the happiness or increasing the pain of one's fellows—that is to say, they based rights on utility. But a more profound explanation is that the real criteria by which both Bentham and his natural-right opponents judged human actions were the same. Bentham carefully appraised the value of human pleasure, on the whole much as a thoughtful Protestant would do. Faced with the bewildering complexity of the world, he tries to simplify it and make it a neater and a nicer place. This is exactly what the French reformers tried to do. Both have a set of values which serve to clothe the abstractions "utility" and "natural right"; and these values are essentially those of the Protestant reform. Utility may seem at first sight, and in the hands of some thinkers may really be, a principle close to common sense and worldly things; in the hands of Bentham, in spite of the many tangible changes it helped to bring about, it becomes quite unworldly and unreal.

Bentham, like the Jacobins, would hold the individual to the moral and political compulsion of a republic of virtue. One hesitates, if only out of respect for tradition, to call him a collectivist; but he was certainly no anarchist. The privilege of providing modern Europe with the first political anarchist was, indeed, reserved for the land of political compromise and illogic. William Godwin, more courageous than his French masters, followed up his assumptions to their bitter and logical end. His *Enquiry Concerning Political Justice* (1793) is based on a touching, if un-English, faith in reason and in the perfectibility of man. Men's passions are under the complete command of their intelligence; their intelligence is capable of receiving the com-

mands of reason; the commands of reason are always exactly fitted to the necessities of the moment. Therefore it follows that only reason, freely working within his mind, should command a man to do something. That a man should oblige his fellow man to act according to reason is superfluous; that a man should oblige his fellow man to act contrary to reason is unjust. Similarly no man should be obliged to obey a written law which, if it applies to the case, is superfluous and which, if as is most likely it cannot apply to a case uniquely a combination of circumstances, is unjust. Therefore there must be no interference by force with a man's will; we may, indeed we must, reason with him, and then of course he will act rightly. Godwin has considerable trouble explaining how so many men in his day have lost this complete possession of reason. He is not very clear on the subject but implies that so many human actions became habitual that men ceased thinking about them, and a partial atrophy of reason set in. The remedy is to set our minds at work continually revising our beliefs. In the present order, of course, vicious institutions keep many men poor and ignorant.

Godwin's anarchism is complete. The family naturally falls before it. Private affections cloud the intellect, and prevent our treating all human beings alike according to the dictates of reason. "The abolition of the present system of marriage," he believes, "appears to involve no evils" (*Political Justice*, 4th ed., 2 vols., London 1842, vol. ii, bk. viii, ch. viii, p. 244). Even voluntary cooperation, as in musical concerts, seems evil to him. Naturally the state, which implies a cooperation in part involuntary, cannot stand. Godwin finds that all government—monarchy, aristocracy, democracy—rests upon the fraudulent assumption by certain men of the power to substitute their wills for the free thought processes of their fellows. The pretensions of a representative assembly to decide matters with the authority of its constituents are ridiculous. Godwin ends by reducing government to a minimum of purely local policing necessary to prevent the evils of anarchy (the word anarchy having bad connotations for him, he does not use it to describe his own system). *Political Justice* may of course be dismissed as the culminating absurdity of the method of deducing a political system by abstract logic from unexamined premises. The present renewed interest in the book, after a century of neglect, is hard to ex-

plain. Perhaps our social scientists are unusually anxious to profit by the mistakes of their predecessors; perhaps Godwin's philosophic anarchism flatters underlying human desires increasingly unattainable in the modern world.

The criticism generally leveled against American political development, that it has not produced political speculation of a high order, is certainly not true of the eighteenth century. If only because of the necessity of working out the relation between the federal and the state governments, the American experiment would be important for the political theorist. Out of the mass of interesting pamphlet literature on the rights of the colonists, the rights of man and the proper form of the new government there emerge particularly the names of Hamilton, Jefferson and John Adams. One general caution must be observed in any study of these men. America has never quite been Europe, and Jefferson himself proves the existence of an opposition even at this time. But Europe was not yet condescending, and the superiority which certain Americans cherished was one based on their nearness to nature—to nature in the eighteenth century sense, the mother of philosophy and natural right. One cannot of course leave Braintree out of John Adams, or Piedmont Virginia out of Jefferson; but as political thinkers and especially in a rapid survey such as this, they are best seen as contributors to a body of thought common to the western world. They belong quite simply to the age and company of Blackstone and Bentham, Mirabeau, Condorcet and Beccaria.

John Adams, both as a politician and as a political thinker, presents certain obvious and often remarked analogies with Burke. For neither of them can there be any question of genuine apostasy from political beliefs founded in conscience. Adams' *Defence of the Constitutions of Government of the United States of America* (London 1787-88) and his *Discourses on Davila* (written as newspaper articles in 1790, published in book form, Boston 1805) stand as the assertion of these beliefs, and it is idle to fling at him bits of his writings of the seventies in apparent contradiction of them. These pamphlets, together with some of the writings of Calhoun, are perhaps the best examples to be found in American thought of formally theoretical political speculation. With their apparatus of classical learning, their wide range of reading among the proper philosophers from Plato on, their clear-cut generalizations, their aristocratic

prejudices, and their curiously personal quality which can perhaps be described, in a villainous paradox, as a sort of cold gusto, they seemed to the nineteenth century rather old-fashioned. Today, now that some of their qualities are again in good repute, they seem less remote.

Adams here is definitely a conservative. Men are not born equal; fitness in each sort of human activity is the gift of the few. Obviously even government should be conducted by the fit. His well-known definition of an aristocrat, unfortunately too long to quote (letter to John Taylor, *Works*, ed. by Charles Francis Adams, 10 vols., Boston 1856, vol. vi, p. 457) is an excellent example of his style and thought. History shows him that democracies can be as tyrannical as absolute monarchies, in that they make possible the tyranny of the majority over the minority. The people are quite as given to luxury as their betters; luxury is self-indulgence, and the footman is as fond of gin, porter and pudding as his master is of burgundy and ortolans (*Defence*, vol. vi, p. 94). He admires the English constitution, and believes in the necessity of checks and balances, of which he discovers eight in the American constitutions. We cannot follow further into the details of his thought, of which the foregoing must serve as examples. The roots of his conservatism (if conservatism be taken to mean a distrust in the capacities and intentions of the ordinary man) lie probably in Calvinist Christianity; yet in some ways Adams' conservatism seems less built out of mystic religious experience and more out of common sense and a politic acceptance of the world than Burke's. In method, certainly, Adams is far from the abstract, geometrical school denounced (and partly invented) by Taine. He has at command much apt and picturesque detail; his generalizations are often made with dogmatic warmth, but they are never empty and abstract.

Hamilton stands today in symbolic opposition to Jefferson. Yet his most important political writings, the *Federalist* (1788), in collaboration with Madison and Jay, and the letters in defense of Jay's treaty, signed "Camillus" (1795), do not as directly contradict Jefferson's fundamental political philosophy as do Adams' pamphlets. Hamilton, however, was directly identified with the American business and financial aristocracy, and helped to formulate their characteristic attitude in politics, an attitude which has on the whole been that of American conservatism ever since. Briefly Hamilton may be said to pass over so lightly the assumptions of the natural rights

school that one might almost assume he accepts them, and to devote his chief attention to getting the government to working in the traditional ways of a strong and efficient plutocracy. This does not detract from his originality or his sincerity. Hamilton supplies what Adams lacks, a certain sense of political contingency. The *Federalist* is of course a classic piece of controversial writing, and one which really seems to have decided the controversy. But it is much more than that. It is one of the best examples in the history of thought of the interaction between political speculation and the necessities of actual politics. One realizes, watching Hamilton struggling to adapt them to his needs, what currency such generalizations as the separation of powers, rotation in office, government by the consent of the governed, the social pact, natural rights and others of the same sort had at the time. In the reaction against the view of the American constitution as struck off from the mind of man, we have perhaps gone too far. The fact is that the American constitution, like the French constitution of 1791, was deliberately framed, and framed in a society where interests, habits, traditions and ideas were competing in extraordinary freedom. The *Federalist* otherwise could hardly have been written.

Jefferson has left even less systematic political writing than Hamilton. Nevertheless his state papers and his correspondence form a body of political thought which, despite the derivative nature of its basic assumptions, has a high degree of originality. Jefferson had a universal curiosity and an experience of all sorts of knowledge, a feat still possible in his century. He had the gift of the catching phrase (witness the Declaration of Independence) and of political aphorism. But there was something else. Jefferson's political philosophy was on the whole that of the French theorists before the revolution—he trusted the common man, thought men more nearly equal than not, especially in virtue, distrusted a strong central government, in which the common man could not directly participate, and which would therefore soon become an oligarchy, and wished the necessary minimum of government to be conducted in small local units. But this philosophy he arrived at by observation of the farming communities about him. He never believed it workable in Europe. "It is my principle that the will of the majority should prevail . . . this reliance cannot deceive us as long as we remain virtuous . . . When we get piled upon one another in large cities, as in

Europe, we shall become corrupt, as in Europe, and go to eating one another as they do there" (letter to Madison, Dec. 20, 1787). America was the elect, not of God, but of philosophy.

This feeling of America's mission, which has colored, sometimes garishly but never meanly, American patriotism ever since, gives substance and reality to Jefferson's abstract principles. The America in which he hoped to realize them is dead. The central government is stronger, and certainly more ambitious, than most European governments, local government is devolving on city managers, and the urban population outnumbers the rural. But the principles remain, and we still hold certain truths to be self-evident. Would Jefferson, were he alive? The answer is not easy, for his was a surprising and complex personality, and seems uneasier in others' formulae than in his own. The lover of his fellow men could write: "The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants. It is its natural manure" (letter to Col. Smith, Nov. 13, 1787).

II. Italy continued to the end of the eighteenth century in a state of political helplessness. Her numerous petty governments were usually backward and often cruel; and yet the Italian people did not of their own initiative produce a political revolt, as did the French, nor an intellectual and literary revolt, as did the Germans. It is one of the numerous difficulties faced by the intellectual historian in his attempt to relate his subject to social and political history that the contribution of Italy to eighteenth century thought, and particularly to thought in the social sciences, should none the less be considerable. Perhaps the best explanation is that Italian thinkers were an *élite* writing under French and English influences, and anxious for a European, rather than an Italian, reputation.

The Marquis Beccaria was both the pupil and the teacher of his French masters, the *philosophes*. His *Dei delitti e delle pene* (1764) was soon translated into the principal European languages, was incorporated into the program of radical thinkers everywhere, and actually did influence such practical reformers as the Englishman John Howard. Beccaria's condemnation of torture and secret accusation in criminal trials, and his demand for reasonable and clear penalties in place of the extreme and therefore frequently evaded punishments com-

mon even in English law of the time, have now been universally translated into practise. His condemnation of the death penalty has been less universally accepted. His book is a mixture of fashionable rhetoric on natural rights, of equally fashionable humanitarian sentiment and of effective reasoning. And for a pioneer work in criminology it is remarkably sound. Beccaria was one of the first to make clear that the prevention of crime is the purpose ultimately served by the punishment of crime.

The book has pretensions to be more than a treatise on crime and punishments. Beccaria pins his specific attacks on abuses and his suggestions for reform to a system of generalizations about society that mark him as an eighteenth century man. The laws which are born of the social compact exist for the sake of "la massima felicità divisa nel maggior numero" (ch. i). Men are moved by self-interest, and therefore yield up to society only that portion of their liberties necessary to secure peace and tranquillity in society. The sovereign created by the compact can wield a power measured by the aggregate of liberties so yielded up. The right to punish—to deprive a man of all his liberties—is thus limited to the minimum exercise calculated to restrain men from breaking the social compact. All punishment beyond this is unjust and contrary to nature. Again, to take a representative passage: "For a punishment to obtain its effect, it is sufficient for the evil of the punishment to exceed the good of the crime, and in this excess of evil must be calculated the infallibility of the punishment and the loss of the good anticipated from the crime" (ch. xv). Although Bentham would have objected to phrases about rights and compacts, he must have accepted not merely Beccaria's practical conclusions but much of his intellectual approach.

The Neapolitan, Gaetano Filangieri, although he lived under what was perhaps the worst of Italian governments, and was even employed by that government, produced one of the most radical of eighteenth century political treatises. His *Scienza della legislazione* (1780-85) set out to continue and improve the work of Montesquieu. The *Esprit des lois* had been too much concerned with what the laws were; Filangieri's work set out to show what, with due regard to historical and geographical differences, as well as to the principles of reason, they ought to be. There is little originality in the book; its interest lies in the completeness with which Filangieri applies to all the subjects he con-

siders—economics, general jurisprudence, criminal law, education, religion—the test of conformity to reason. He is no anarchist and no collectivist, and he is guided in his specific suggestions for reform by no fundamental philosophical assumptions beyond the characteristic eighteenth century utilitarian psychology. His radicalism comes from the application to each problem of a practical sense which is yet far from common sense. He is the extremist among the theorists of benevolent despotism. Yet Filangieri abounds in occasional bits of wisdom, and now and then gives way to sensible doubts. He has an interesting passage (bk. iv, ch. xxxviii) on the method of the social sciences, where he points out that in chemistry elements may be isolated, weighed and measured, but that in politics, even though it may help to assume that causation operates as in the physical sciences, we cannot apply the methods of mechanics and mathematics.

The Enlightenment in Germany was rather a moral and philosophical movement than a political one, and those who reacted against it, like Kant and even Herder, belong rather to the intellectual history of the nineteenth century than to that of the eighteenth. Germany was still a collection of states under the remains of the mediaeval empire, she had suffered an unbelievable setback in the Thirty Years' War, her upper classes were slavish imitators of French court manners, and her middle classes prosperous enough, or custom ridden enough, to accept the political order without complaint. The Enlightenment is indeed a movement parallel with the similar rationalist movements in France and in England; but in Germany it is singularly superficial and devoid of explosive power. German political thought continues seventeenth century natural-rights philosophy (which gets reduced to a sort of scholasticism) and grafts upon it certain importations from the French, and an insistence on the omnipresence of the state which is explicable enough in terms of German political experience, but which hardly jibes with some of the premises of the natural-rights philosophy.

Of these philosophies of the Enlightenment Christian Wolff may be taken as a type. His *Vernünfftige Gedanken von dem Gesellschaftlichen Leben* (1721) and his *Jus naturae methodo scientifica pertractum* (1740-48) form a system based on the equality of men before nature. Differences in rights are acquired, the results of historical growth. By nature, however, all men

have the same rights and the same duties. No man has the power to interfere with other men. By nature all men are free (*Jus naturae*, ch. i). The aim men pursue in the state is *Vollkommenheit*, perfection or self-realization, which can never be attained, but toward which men are gradually moving. Here are liberty, equality and progress all in black and white. But for Wolff these are apparently the necessary and philosophic abstractions with which one approaches the study of politics. His actual program is purely a theory of the benevolent despot, and gives an extraordinary scope to state action. One cannot even say that he is consistently in accord with the rationalist philosophers who would use state action to create a new society based on logic and not on history. He is for the old guilds, limitations on the number of apprentices, and against freedom to emigrate. He defends censorship of the press, and even goes so far as to admit a mild and humane use of torture in criminal trials. Wolff's theories of the origins of society take on the fashionable form of the compact. The government created by the pact, however, is bound to conform not only to the laws of nature but to the fundamental laws agreed upon when the society was formed. If these laws are violated, the people have the right of resistance. From Wolff's whole political writings it is perhaps not unfair to conclude that the natural-rights formula had no necessary connection with revolution; it had become so universally accepted that it had no practical implications.

The beginnings of the peculiarly modern and literate type of nationalism may be seen in German literature of the latter half of the eighteenth century. In political writing the followers of the French had never been unchallenged. Justus Möser, who spent his whole life as lawyer and judge in the little Westphalian town of Osnabrück, is only one of many eighteenth century publicists in Germany who repudiated the new cosmopolitanism. Möser wrote an introduction to the history of Osnabrück, in which the value of social, as opposed to purely political, history is emphasized, as well as numerous political essays, the *Patriotische Phantasien* (1778). He is a traditionalist, a conservative who believes in defending the good old Germany of the soil. He detests modern reformers who would abolish history in the name of reason. In point after point he opposes the individualistic and utilitarian tendencies of the time, even when they are turned into humanitarian channels.

With the natural rights of illegitimate children, for instance, he has no sympathy. Society owes them nothing, for they menace the most sacred human institution, the family. Möser, if he insists that history and not logic is the first teacher of the political philosopher, can nevertheless hardly be called a realist. For he finds in history a vague ideal of Teutonic freedom, antedating the abuses of the Middle Ages—the freedom of German tribesmen uncorrupted by inequality of property holdings.

There are, however, political thinkers who seem even more completely opposed than these German patriots to the normal way their contemporaries went about the study of politics. No account of eighteenth century thought would be complete without the mention of two men who yet scarcely fit any of the commoner generalizations about it—the Neapolitan, Giambattista Vico, and the Irishman, Edmund Burke.

Vico, whose great work the *Principi di una scienza nuova intorno alla natura delle nazioni* (1725-44) was little known until the nineteenth century, is often given credit for founding the philosophy of history, a form of intellectual activity highly developed in the days of Hegel and Comte, but held by professional historians in disrepute until the present moment, when it bids fair to become popular again as a methodology or synthesis of the social sciences. In this field Vico developed a theory of the flux and reflux of civilization through different societies—Greece, Rome, the Middle Ages—which is elaborately worked out, with a somewhat scholastic fondness for the figure three. Vico finds three sorts of government which succeed each other in order of time in all societies: the divine, when men make gods to rule them; the heroic, when heroes, demigods, rule them; and the human, when intelligence rules them and they devise laws and the idea of civil liberty. This is the height of civilization a given society can attain. Reflux begins, men become overcivilized, and the third form reverts to the first. Whether Vico thought this process was an eternal repetition, or whether he believed each cycle had benefited from the previous ones, is not wholly clear. Vico also figures as a forerunner of Montesquieu in the sociological approach to the study of law, though it is to be doubted if the French philosopher could read the *Scienza nuova*. And there is, especially in Vico's careful study of Roman law and early Roman civilization, a great deal to justify this statement. But perhaps Vico's general philos-

ophy, and in particular his theory of knowledge, is more important even for the social scientist than the results of his investigations into historic fact, which were partly invalidated by his peculiar superstitions, such as his fondness for triads, by his religious mysticism and by his lack of tools for research. His theory of knowledge, however, definitely anticipates the nineteenth century reaction against Cartesianism which was to be so important for the social scientist. Vico refuses to accept the Cartesian *cogito ergo sum*, and the resultant tests of truth by clarity and of scientific method by mathematics. He identifies *knowing* with *creating*. God alone has perfect knowledge, since God alone created all things. But of the feeble knowledge vouchsafed man the best, apart from divine revelation, is that which corresponds to the field in which he exercises his creative power. Now man has created the society he lives in, though he has not created the universe about him. Hence our best knowledge is not of mathematics and the mathematical sciences but of history and the historical sciences. It is not abstract speculation that is valuable, but the hard fact, the individual; it is not the superficial similarities of things the thinker should pursue, but the fundamental differences. Real knowledge is a conquest to be won literally by the sweat of one's brow. Vico's whole work, in the very confusion and trouble into which his restless desire to get beyond the smoothness of thought into the roughness of things causes him to fall, is a striking contrast to the cocksureness of much eighteenth century thought.

Although Edmund Burke never wrote a formal treatise on politics, there are more political ideas in his speeches and letters, and especially in his pamphlets on the French Revolution, than in most treatises. He is, however, a difficult man to get into a few words. His complexity is one of depth as well as breadth, and sets him off even more completely than Vico from his century. Of his breadth there is sufficient evidence in the fact that political thinkers of such different allegiances as the liberal Morley, the conservative Hugh Cecil and the laborite Harold Laski should all find in his philosophy important elements of truth. Of his depth the sober analysis whereby in 1790 he predicted the Napoleon of 1804 should prove an adequate example. Burke denied the existence of rights and defended political expediency; but he was no utilitarian. He distrusted the common man and believed in aristocratic rule; but he was not an

unimaginative standpatter. What lies at the bottom of Burke's thought, however, makes him in 1790 almost a heretic among publicists; he is a Christian, a pessimist and no believer in progress. He lived too much in the world, of course, not to have uttered at times words which seem to contradict this. But any thorough study of his whole work will bring out these fundamental conservative beliefs. To Burke man was a fallen creature, not to be redeemed on this earth; to give him freedom was to unleash the brute. Civil society and law, tradition, custom, habit, loyalty operating within it almost miraculously make men behave far better than a psychological study of the isolated individual would lead one to think possible. But society represents at any moment a delicate equilibrium between rest and unrest, and if you disturb it, as the French are doing, to rewrite all the laws according to reason, you destroy the equilibrium, and the brute in men, which the old laws and the old loyalties have put to sleep, is awakened and will have no respect for your new and perfect laws. Burke's pessimism enabled him to see things most of his contemporaries were too hopeful to see, and his literary skill has embodied his observations in aphorisms scattered throughout his works. This, and a certain moral earnestness that seems to underlie even the ravings of the *Regicide Peace*, may account for the respect which men of such different political faiths have felt for the writings of Burke.

III. Economics, even in the latter half of the eighteenth century, was hardly a special science. Most men who wrote on economic subjects also wrote on other subjects, or incorporated their thoughts on economics into political or literary works, as, for example, Montesquieu, Filangieri and Hume. The originality of the *Wealth of Nations* is partly one of form; it is the first complete systematic treatise on economics in the modern sense written by a thinker of the first rank. Of course the day has long gone by when Adam Smith had no predecessors and few contemporaries. Mercantilists, cameralists and physiocrats (*supra*, p. 121-24) may now be admitted to have contributed much to the methods, the material and even the theories of the most scientific of the social sciences. In the confusion of writings on economic subjects in the eighteenth century it is extremely difficult to say, "This went into the making of classical economics, and this did not," or, "This is orthodoxy, and this is heresy." That dull

mercantilist, Steuart, has interesting anticipations of Malthus on population; Italian mercantilists such as Genovesi do useful work on monetary theory. We shall therefore mention hastily some British thinkers who are perhaps better catalogued as "forerunners of Adam Smith" than as members of already existing schools, and then turn to the founder himself.

Mandeville, though he fell into the shocking make-work fallacy, yet brings forward in his *Fable of the Bees* (1705; enlarged ed. 1714) a theory that private vices make public virtues, that is, that men working selfishly in their own interests will unconsciously cooperate in working for the public good. Josiah Tucker, dean of Gloucester, wrote many pamphlets on politics and economics. It would appear from the point of view of a later period that he kept his politics and economics in separate parts of his mind, for he was both a conservative and a free trader—a combination, however, not as surprising in eighteenth century England as it would have been in 1840. As a Tory he thought the American colonists' arguments about their indefeasible rights sheer nonsense, but as a free trader he came to the conclusion that the colonies were a nuisance and should be cast off. Wars for the sake of trade, he predicted, would one day seem as absurd as the crusades. Hume in his economic writings is as clear-sighted and as fragmentary as usual. He sees at once the fallacy of the mercantile position on the accumulation of money, an attempt which is as ridiculous as trying to keep water above its natural level. He emphasizes the stock of labor as the true source of wealth. His monetary theory is surprisingly sound, and even his often criticized remarks about the stimulating effects of rising prices are true in themselves. Smith himself owed much to Hume, whom he knew and revered, as well as to his teacher Francis Hutcheson, to whose chair of moral philosophy at Glasgow he succeeded. The latter's influence upon Smith was no doubt largely in the field of philosophy; nevertheless Hutcheson mixed economics with ethics, and in his *System of Moral Philosophy* (1755) has familiar ideas on the division of labor, value and interest. He makes a clear distinction of the sort Smith was later to make between value in use and value in exchange (*System*, vol. ii, p. 53).

The *Wealth of Nations* (1776) shares with the work of the physiocrats the honor of elevating economics from a narrow study of the mechanism of commerce to a genuine discipline,

to a study of the production and distribution of wealth. In a sense everything of importance Adam Smith wrote has been supplanted. In the more complicated reaches of economic theory—including value, rent, money, population and much else—the successors of Smith have gone far beyond him, and even the so-called “classical economists” from Ricardo to J. S. Mill differ from him in many ways. But Adam Smith did bring out clearly many ideas about the division of labor, the distinction between value in use and value in exchange, between wages, interest, profits and rent—to give merely a few examples—which have since become commonplace. He brought out clearly in his treatment of the details of economic life certain principles whose political, and even scientific, influence is still very great—notably that of the non-interference of government in business (summarized, though not by Smith himself, as *laissez-faire*) and that of free trade. Finally, although his language is the literary tongue of his century and although he therefore hardly appears as an inventor of a special scientific terminology, he marked out much of the ground which economics (and especially economics as distinct from sociology) has since occupied. For these reasons he deserves the salient position among economists that common opinion has always given him.

Adam Smith serves as well as lesser men to point the commonplace that thinkers depend on their physical environment. Just as Quesnay, country-bred and citizen of an agricultural nation, stressed land as the ultimate source of wealth, so Smith, citizen of a great commercial country already stirring with the industrial revolution, stressed labor as the source of wealth. The labor of artisans and business men seemed to the physiocrats inferior and even “sterile” labor; to Adam Smith the capitalist and the business man are integral parts of the machinery for the creation of wealth. But our beliefs depend partly on the beliefs held by our contemporaries, and of this somewhat neglected commonplace Adam Smith is also a good example; moreover the question of Smith’s affinity with other eighteenth century thinkers, and especially that of his ideas of a natural order with similar ideas held by other workers in the social sciences, is one that is very close to the aims of this survey.

Some commentators have discovered an antinomy between the *Moral Sentiments*, where Smith founds morality on human sympathy, and the *Wealth of Nations*, where he founds eco-

nomics on human selfishness. Such a view is unjust, for to Smith sympathy and self-interest are simply complementary aspects of natural human activity. Sympathy is a kind of inverted self-interest that serves to check us automatically in our relations with our fellow men. When men act as they want to, their actions, isolated and anarchical though they may seem at first sight, are really in accord with an underlying scheme of things, a natural order established by Providence. The careful investigator into men’s economic activities, for instance, will find beneath the apparent disorder of hundreds of different enterprises, the higgling of the market, the conflict of thousands of interests, the clear principles and admirable order so well described in the *Wealth of Nations*. Governments, for lack of true knowledge, have often interfered with this process. But they have added real and harmful disorder to the merely surface confusion of natural economic life, and have thus prevented the designs of Providence from working themselves out completely. Therefore governments should in general refrain from interfering with the economic activities of their subjects. In the next century critics like Cliffe Leslie held that Smith’s belief in a natural order was arrived at *a priori*, that it was a part of the false thinking common to his century, and that it therefore vitiated somewhat the enormous amount of direct observation embodied in the *Wealth of Nations*. As this is a point which involves in general the methodology of the social sciences in the eighteenth century, we shall return to it later. But it may be remarked here that Smith himself did not hold as rigidly to the principle of *laissez-faire*, nor insist as warmly on absolute, immutable economic laws, as did some of his nineteenth century successors.

The most interesting book on economics published in France in this period is Richard Cantillon’s *Essai sur le commerce* (1755, but written about 1730). Cantillon was an Irishman who had made a fortune in banking in Paris, and his little book shows an extraordinary grasp of practical detail as well as much speculative ability. Though Adam Smith refers to it, the book was little known until Jevons rediscovered it and held it up as the most complete of the forerunners of the *Wealth of Nations*. Cantillon’s opening sentence is in the best style of the eighteenth century, clear in definition and compressed: “La terre est la source d’où l’on tire la richesse; le travail de l’homme est la forme qui la produit; et la richesse en elle-même n’est

autre chose que la nourriture, les commodités et les agrémens de la vie" (pt. i, ch. i). Note that in that one sentence Cantillon emphasizes equally the role of land and labor (which neither the physiocrats nor Adam Smith did), and that he gives the modern, as opposed to the mercantilist, definition of wealth. Cantillon's theory of value (pt. i, ch. x) shows the same merits of brevity, apt illustrations and ability at generalization. He concludes that "intrinsic value" is measured by the land and labor involved in production, allowing for the goodness or product of the land and the quality of labor. He then distinguishes between "intrinsic value" and market values. He arrives at these generalizations by studying Brussels lace, for instance, and he has constructed elaborate statistical tables to show how the amount of labor involved in lace making, together with the cost of material, etc., about equals the price. Cantillon has interesting passages anticipating the study of the role of the entrepreneur, is good on money, and extremely good on international trade. The essay was apparently written about 1730, nearly half a century before the *Wealth of Nations*. This fact suggests that, if the influential works in the history of thought are dependent on social and economic conditions for their success, the human mind itself is perhaps somewhat less limited, and may sometimes steal a march on its environment.

Most of the continental economists of this period may be classed as physiocrats or mercantilists, and need not here be considered. But a word should be said about Condillac, who in his *Le commerce et le gouvernement, considérés relativement l'un à l'autre* (1776), though not otherwise very original, does anticipate the psychological theory of value. We value a commodity because of the use we think we can get from it. Scarcity gives a commodity greater value, and abundance gives it less, but this value is based less on its actual scarcity or abundance than on the opinion we form of its scarcity or abundance (pt. i, ch. i).

IV. The greatest historians of the eighteenth century are included in the school usually called "rationalist" (see Section VI). But there are other, and as far as the later writing of history goes, more important ways of approaching history than that exemplified in the elegance and speculative acuteness of Hume or Gibbon. By 1800 great progress had been made in the accumulation and criticism of source material, and in

the writing of social, as opposed to merely political, history.

The *Acta sanctorum*, going back in conception at least to Heribert Roswedye (1569-1629), and treating the lives of all saints under the day consecrated to their worship, had by 1786 proceeded from January 1 to October 11. Their great founder was John van Bolland (1596-1665), and the patient monks who worked with him and after him in what still remains one of the greatest monuments of scholarly cooperation are known as the Bollandists. The level of the different lives varies greatly, but the *Acta* as a whole contain an enormous amount of material, not merely for church history, but also for political, constitutional and social history of a period which, in the eighteenth century particularly, was very little known. It was one of the collaborators in this work, Daniel von Papebroeck (1628-1714), who began the study of diplomatics later worked out by Mabillon.

To Jean Mabillon (1632-1707), of the Benedictine Abbey of St. Germain des Prés, and to the Maurists who followed him, belongs the credit of working out a whole critical apparatus for the study of historical documents. Mabillon's *De re diplomatica* (1681) sets out criteria for judging the authenticity of original source material, outlines the beginnings of a science of palaeography and even of such very special subjects as sigillography. The Benedictines continued during the entire eighteenth century their careful reconstruction of mediaeval history and the working out of historical method, and in 1765 the monks of the congregation of St. Maur issued their *Art de vérifier les dates*, where scientific methods are first introduced into the confusion of historical chronology. The century often supposed contemptuous of history and fond of glib generalizations and easy synthesis is also the century of painstaking research and of critical establishment of canons for sifting evidence.

This critical spirit appears in other fields of history, notably in those of Greece and Rome. The study of classical antiquity, revived by the great scholars of the Renaissance, suffered from the undue reverence which the humanists had for their subject. In the eighteenth century with such men as Barthélemy and Winckelmann archaeology emerges as a distinct discipline. Vico had begun the search for the social origins of Roman law and had anticipated Wolf on Homer. At the very end of the century Niebuhr inaugurated the modern study of early Rome,

destroying a mass of uncritical ideas springing largely from Livy and kept alive by the current system of education. A book like the Huguenot refugee Thoyras' *Histoire de l'Angleterre* (1724), once extremely popular in England, is representative of much eighteenth century work. It is full of prejudice in favor of the Protestant cause; it is moreover ill-digested, quite lacking in the flow and form of the rationalists. But it is full of material gathered from original sources, and it constantly attempts to show how what are now regarded as national characteristics have a historical origin.

Another contribution of the eighteenth century to historiography is to be found in its interest in social history. It is not, of course, that such history was particularly new. As far as his subject matter goes, Herodotus was a social historian. But what characterizes modern interest in social history is a more or less definite belief that the conditions under which ordinary men live can be scientifically analyzed and therefore modified for the better. This interest is a part of the democratic movement which marks the rise of the middle class. Once that class was established, it began to seek in history some compensation for the dulness of its ordinary life, and the romantic schools of historians arose. But in the eighteenth century history remains sober, whether it deals with kings or peoples. Voltaire's *Essai sur les moeurs* is of course social history, and so is much of Montesquieu. Charles Duclos' *Mémoires pour servir à l'histoire des moeurs du XVIII^{me} siècle* (1751) is an example of much contemporary writing on the borderland between sociology and history. But social history flourished best of all in Germany, with such men as Möser and M. J. Schmidt. A passage from Schmidt's *Geschichte der Deutschen* (1778) has a familiar sound: "Most historians are content to chronicle the changing rule of princes and aristocracies, without bothering about the condition of the people But if at the same time the historian does not consider the degree of national happiness he does not seem to me of much use" (preface).

V. It would be impossible, of course, to include in this essay all the important writers in the social sciences in the latter half of the eighteenth century. No doubt discoveries can still be made, and many monographs are still to be written in this field. For the convenience of the student and the general reader who may wish to

go into the subject for himself, the following list of names is appended. The list is not, of course, exhaustive but, taken with the names already considered, includes what is important in the four chief modern tongues and Latin.

POLITICAL WRITERS:

D'Argenson, Babeuf, Blackstone, Brissot de Warville, John Brown, Burlamaqui, Condorcet, Camille Desmoulins, John Dickinson, Diderot, Cl. Dupin, Adam Ferguson, Sir Philip Francis, Franklin, Frederick II, Abbé Grégoire, Helvétius, Jurieu, Linguet, Mably, Sir James Mackintosh, Madison, Mercier de la Rivière, Mirabeau, Morellet, Otis, Paine, Paley, Price, Priestley, Abbé de Saint-Pierre, Bernardin de Saint-Pierre, Shaftesbury, Siéyès, Thomasius, Vattel, Volney, James Wilson, Mary Wollstonecraft.

ECONOMISTS:

Mostly mercantilists or physiocrats, but the Abbé Galiani and Verri, in addition to those mentioned in the text, are worth looking into.

HISTORIANS (excluding the "rationalists"):

Algarotti, Anquetil du Perron, Thomas Birch, Carli, Gatterer, Grosley, Sir William Jones, William Maitland, Joh. Müller, Muratori, de Pauw, Roscoe, Schlözer, Sismondi, Spittler, Soultavie, Tiraboschi.

No attempt at summarizing in a critical fashion the social-scientific thought of the second half of the eighteenth century can do justice to the subject. Certainly we cannot accept the evaluation of eighteenth century thought by such nineteenth century critics as Taine, although theirs is still the current view. The thinkers of the age of revolutions were, according to this view, imprisoned in an artificial universe constructed out of Descartes and Newton. From Descartes they learned to distrust all knowledge not capable of mathematical formulation. From Newton they learned to seek even in human relations for laws of mechanical causation. Their thought is therefore abstract and inhuman; their conclusions apply only to an artificial man of their own creation, a man as unlike existing human beings as a geometrical figure. Their program of reforms, built to suit this artificial man, cannot apply to human beings. To dangle it before real, imperfect men is highly dangerous, as the French Revolution proved.

Now there is no use denying the element of truth in this criticism of eighteenth century

methods in the social sciences. But in its extreme form this criticism is as far from facts as it believes the eighteenth century to have been. In the first place, it is obviously truer of minor thinkers like Holbach than of great ones like Montesquieu. Again, it fails to take into account the complexity of the intellectual interests of the time, to include Burke, Vico, the German patriots, Adam Smith, the Rousseau who inspired the romantic movement. Even the cruder thinkers, who fell most easily into generalizations about the natural man, were partly led into a false method by a desire to get things done, to arrive at conclusions that would influence their fellow men to action. It is notable that, although much early eighteenth century work is in Latin, almost all work done in the second half of the century is in one of the modern languages. Up to a point, as any study of the Jacobins will show, a certain amount of abstraction is extremely practical as political propaganda. Finally these men were pioneers of a sort, and subject to the rashness and overconfidence common to intellectual pioneers. They were trying to put on paper the lofty aspirations of the growing middle class.

Such explanations—one might almost say, such apologies—are necessary for the normal level of thought which is determined by the "spirit of the age." But it is almost a commonplace that the great men of an age, though they embody its spirit, also transcend it. For such men as Montesquieu, Adam Smith, Rousseau and Bentham no crude formulae about *a priori* thinking can hold. Indeed the whole problem of the use of the deductive method by eighteenth century thinkers is one that deserves a more truly critical treatment than it has commonly received. Certainly the men of the time thought they were appealing to experience. Most of them were willing enough to appeal even to historical experience. The facts which they used to build up their theories may seem to us now insufficient in number and even inadequately established as facts, but as facts they did command the respect of the thinkers who used them. French republicans sought to model themselves on Roman republicans; even the utopian socialist, Morelly,

tried to find socialism in fact in ancient Sparta.

But is not this mere appealing to an arbitrary set of facts to confirm an arbitrary theory, or rather is it not molding fact to desire? No doubt many eighteenth century thinkers saw only the facts they wanted to see. But are desires and hypotheses utter aliens to each other in the consciousness even of the modern scientist? The eighteenth century did at least avoid the error that facts can take care of themselves, that induction is a process that goes on in the mind of the thinker, indeed, but without any active co-operation on his part. What the modern scientist means by a theory or a hypothesis is what the eighteenth century thinker meant by a law of nature. For both, the chaotic, accidental world as it appears to the senses—and even to common sense—can be made to appear orderly to an inquiring and persistent mind. The social sciences today, as well as the physical sciences, are more aware of the complexity of the sense world, more aware therefore of the necessity for careful research; they are more tentative and less dogmatic than in the eighteenth century. There adheres to the eighteenth century idea of natural law something more of ethics and theology than is fashionable nowadays, at least under those names. But the concept of a "natural order" not apparent to the unthinking man is common to both centuries.

What, then, is left of the social sciences in the latter part of the eighteenth century? A great deal of propaganda, of popular writing that first helped arouse a class consciousness in the middle classes, and made great numbers aware of the existence of social problems; a tradition, therefore, of the intimate connection between the social sciences and practical politics; the work of certain great founders, like the economist Adam Smith and the sociologist Montesquieu; a great deal of patient research, an accumulation of facts that can still be used to support theories other than those held by the workers who first uncovered the facts; and, finally, the concept of a natural order for which all science is a search.

CRANE BRINTON

IX

Individualism and Capitalism

I. What were the inescapable facts and ideas which surrounded and impinged upon the senses of the thinkers who formulated social theories in the early decades of the nineteenth century? Before settling down to an examination of that problem we should consider briefly a closely related philosophic question which has accompanied speculation since the days of the Greeks, namely, which is older, the fact or the idea? "In the beginning was the Deed" (*Am Anfang war die That*), we are informed by the poet Goethe. "In the beginning was the Word," we are told by the theologian. The great debate has never been closed to the satisfaction of the contestants, but William James has given us a fair working formula in the declaration that the worlds of fact and idea have evolved together. Their relations are reciprocal and no sword of reason has yet been forged with an edge fine enough to separate them. Whoever would seek to penetrate to the heart of an age or indeed to divide indivisible time into ages must reckon with this instrument of thought.

Undoubtedly new facts are easier to discover than new ideas, assuming for the moment that the two are separable for the purposes of thinking about them. The first use of the steam engine to turn wheels, the first loom driven by power, the first successful crossing of the Atlantic by a ship driven by steam were new facts in the history of the world. But the cluster of ideas associated with each of these facts wears ancient aspects. Indeed the idea that such things could be done was as old as Roger Bacon at least, to make no reference to the use of steam by the Greeks. Yet for the great mass of humanity the appearance of each of the material phenomena mentioned above was a new fact, stirring up old ideas and suggesting new ideas.

There are times in the history of the world when facts almost stand still, when ways of living, working, traveling and fighting change so slowly that thought more than catches up with them—seems in reality to control, rather than to reflect, them.¹ Broadly speaking, such a

period was the Middle Ages. Then again there are periods when new facts come pell-mell upon the world, devastating wars and revolutions, epoch-making inventions, defying old systems of thought, making them appear incongruous with the world of reality and compelling a revision of logical patterns once satisfactory to their possessors. Sometimes these new facts come so swiftly and spread so widely that thought is apparently incapable of reducing them to a system, to say nothing of controlling them in relation to ideas, inherited or novel.

Nevertheless even in such periods of history the relations of idea and fact are still reciprocal. If, for example, modern emphasis on the production of goods seems to flow from the fact of machinery and tends to a secularization of thought, it must be said that the secularization of thought which accompanied the renaissance of pagan learning stimulated interest in this world as distinguished from the next, lending sanction to the enjoyment of goods and thus promoting their manufacture. Long before the Protestant revolt and the rise of Calvinism, to which too large a part of the commercial spirit is now uncritically attributed, secularism was growing in Catholic learning and doubtless would have increased had the quarrels of princes and popes never taken place—assuming for the moment that, given the contemporary movement of ideas and facts, such quarrels could have been avoided by some process.

However closely a new fact of high significance may be related to a pre-existing cluster of ideas, it nevertheless runs like a sword into the old web of ideas. At first it must be considered in terms of those ideas, their logical form and phraseology. It may excite wonder and surprise, produce ejaculations of amazement and incredulity, but when its implications are considered, the nature and purpose of control over it (if any) must be geared up to the inherited stock of opinions, morals, creeds, laws and sayings. Gradually the new fact is worked into

¹ See George O'Brien, *An Essay on Mediaeval Economic Teaching* (London 1920) p. 189 *et seq.*, for changes in scholastic theories of interest and usury accompanying increas-

ing opportunity to accumulate and lend money. Also Edmund Schreiber, *Die volkswirtschaftlichen Anschauungen der Scholastik seit Thomas v. Aquin* (Jena 1913) p. 227 *et seq.*

the old body of thought, effecting changes in it, making some of it obsolete, giving novel direction to the remainder, and suggesting idea patterns which at least have the appearance of novelty. This operation of readjusting facts and ideas requires time; hence there is always a lag between the appearance of an important fact and the formulation of systematic thought about it. And inevitably such systematic thought, being the product of thinkers, bears some kind of relation to the connection of the thinkers with the fact, a connection that may be close, remote, friendly or hostile. Perhaps it is principally for this reason that the political philosophies of countries seem to vary so materially in rhetorical form. For example, when the English middle classes overthrew absolutism in the seventeenth century, the dominant body of inherited thought was religious—hence the Puritan revolution was defended in Biblical imagery; but when the French carried out the same kind of revolution more than a hundred years later, natural science had made such strides that “natural” rights appeared to be more real than the admonitions of the God of the Old Testament.

II. Now the central fact that gave decided character to the decades between the French Revolution and the middle of the nineteenth century was the rapid, almost bewildering, rise of capitalism to a position of dominance in western civilization. The term calls for definition. What is capitalism? Laying aside all collateral issues and going to the heart of the matter, it is a system of production, involving social relationships, in which the primary object is the gain of profit through exchange.¹ Among the primary social relationships created by it is the association of employers and employees in the process, the former as dominant directors and the latter as the source of labor skill and strength. Capitalism is not synonymous with machine industry, although it has flourished most luxuriantly in the age of technology. It is not synonymous with manufacturing; indeed conceivably it might take over the entire scheme of agricultural economy. It is not synonymous with objective capital goods or accumulations of instruments of production, for in that sense feudalism was capitalistic in that it had instrumentalities devoted to production.

Yet wherever this system of production has overtaken the static order of feudalism and

guilds—production primarily for use and exchange at “a just price”—it is accompanied by certain outward signs, material and human: (1) mines, factories, machines, railways, stores, warehouses and other implements of production and banking and systems of credit on a large scale; and (2) owners of the means of production, directors, technologists and laborers ranging from skilled craftsmen to casual workers. The seats of capitalism are in the cities, not the open country. In the main it is employed in the creation and distribution of manufactures. Unlike agriculture and handicraft industry, producing for use or local exchange at a just price, capitalism has apparently indefinite boundaries for expansion. The amount of land available for cultivation is fairly limited (though science works wonders here also), but the area of capitalistic operations has no limits visible to the naked eye. The amount of wealth that can be amassed by it, the number of men and women who can be employed by it, seem capable of indefinite expansion. That is not all. The agriculture of a country is carried on within its geographical boundaries and under its flag, while the capitalism of a nation may carry on operations under many flags in all parts of the world. Conceivably the capital of any particular nation invested abroad might exceed in value the capital invested at home.

In its economic methods and also in its technological aspects, capitalism is essentially rational, involving no mystic elements for guidance in practice or in the increase of goods. The uncertain elements of nature which plagued the agriculturist of the ancient type—rain, drought, insects and declining fertility, to be influenced by exorcism of spirits—do not appear in the capitalist's world. As to the technical aspects of capitalism, there can be no doubts; it is governed by the laws of mechanics and physics which can be expressed in terms of mathematics: mass, weight, extension, number, movement, etc. If capitalism is restricted to its proper economic meaning as a social relation, still its essence is rational. Every operation is based on calculable factors which can be mirrored in balance sheets; extension of plant, raw materials, “hands,” output, prices, sales and profits. Capitalists may pray for riches, but they know that the invocation of saints will not automatically, by some unseen process, make them rich. They may need “psychology” to improve “industrial relations,” but such improvements are reflected in ledgers and registers.

¹ P. Rostock, *Der Ausgang des Kapitalismus*, p. 1-8.

III. The age which witnessed the rise of this system of production to a position of dominance in western civilization is the period of early capitalism. In this connection "early" is a purely relative term, in a strict sense scarcely correct. In essence early capitalism is no different from late capitalism, for the system of production does not vary in itself, but it takes time for capitalism to spread over a wide area of a nation's economy and at last reach a position of dominance. That is self-evident; hence the justification for the application of the term "early capitalism" to the period of history here covered.

But how can we discover just when capitalism has reached a position of dominance? This question is not so easy to answer. One measure, of course, and an important measure, is the value of the instruments used in capitalistic production as contrasted with agriculture. Another measure is the proportion of workers employed in capitalistic enterprises, as contrasted with handicraft and agricultural undertakings. Still another measure is the influence exercised by the possessors of the bulk of the capital goods in the processes of government, domestic and foreign, an influence difficult to assess, but none the less real. Historians could throw some light on it if they would. Systems of suffrage and representative government afford outward signs; secret documents sometimes unearthed help to reveal the true inwardness of politics.

Judged by such standards early capitalism passed over into high capitalism at different periods in the different nations of western civilization. Approximate dates may be fixed for convenience. For England the year 1846 may be chosen: English capitalism, triumphant in the world market, had no need for a protective tariff, especially on grain consumed by its employees; in that year it smashed the agriculturists in Parliament and forced the adoption of the free trade principle—extended later. In the United States the value of the instrumentalities employed in the capitalistic process overtopped the value of the land about 1850; and in 1865 the armies of the southern planters laid their swords at the feet of northern victors. The Revolution of 1848 in France, which revealed the power of organized labor, likewise revealed the power of capitalism; and the latter triumphed in the struggle, announcing the new day. It will not be forgotten that the Orleanist monarchy established in 1830 was avowedly a

bourgeois monarchy. In Germany capitalism did not get into full swing until after 1870 and its triumph was not politically realized until after the collapse of 1918. In southern and eastern Europe generally, the capitalist process had not advanced beyond its early stage at the opening of the twentieth century—delayed by many factors, including the competition of the countries already far on the way.

IV. An inquiry into the nature of this social giant, equipped with steel and steam, must be prefaced by some reference to its origins, especially as there is a tendency to make it identical with the spectacular appearance of inventions in the eighteenth century and to connect it intellectually with the Protestant revolt, more narrowly with Calvinism. Indeed the late Sir William Ashley said that Calvin's letter lending theological sanction to interest (and usury in practise), written in 1545, marks a turning point in the history of European thought. Other writers with less critical discrimination seem inclined to make this the beginning of a capitalist philosophy, inspiring a great upswing in capitalism. Max Weber finds the true "spirit of capitalism" in Benjamin Franklin's *Advice to a Young Tradesman*—a document appropriate to Calvinistic Boston.¹ Indeed, if some thinkers of this persuasion are to be believed, the idea preceded the fact: capitalism sprang from the soil of Calvinism: thrift, promptness, industry, honesty the best policy, economic expediency, coupled with interest and profit. Thus the prejudices and passions of religion are associated with the process of attempting to understand the greatest phenomenon of the modern age.

At the other end of the scale are the economists who find the origins of capitalism in sources less mysterious than Calvinism, in primitive accumulations, the gold of the New World, and oceanic commerce opened in the age of discovery. All explanations in this direction are little more than variations on the statement made by Marx in the closing chapters of the first volume of *Capital*. With sweeping dogmatism he crowds everything into a few lines: "The discovery of gold and silver in America, the extirpation, enslavement and entombment

¹ Max Weber, *Gesammelte Aufsätze zur Religionssoziologie*, 3 vols. (Tübingen 1922-23) vol. i, p. 30 et seq; Henri Hauser, *Les débuts du capitalisme*, p. 45 et seq. Protestants from capitalist countries, proud of the achievement, accept the allegation as an honor; while Catholic writers, whose religion flourishes best under pre-capitalistic conditions, accept the allegation as a discredit to Protestantism. Science is not concerned with the merits of this controversy.

in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins signalized the rosy dawn of the era of capitalist production. Those idyllic proceedings are the chief momenta of primitive accumulation. On their heels treads the commercial war of the European nations, with the globe for a theatre . . . Capital comes dripping from head to foot, from every pore, with blood and dirt." Like the Calvinistic explanation, this has the merit of simplicity. When modified or extended in the hands of such writers as Sombart, it still seeks the origins of capitalism in external facts rather than ideas—leaves out of account certain subjective factors without the presence of which no system of bare robbery could permanently flourish.

The truth is that neither simple explanation of capitalism is tenable. Great emphasis can be given to Calvin's teachings on interest only by scholars who are unfamiliar with the doctrines of the scholastics—especially the later writers of that school who sought to apply the principles of Thomas Aquinas to changing circumstances, with a high degree of theoretical and practical success. There was in fact nothing in the dogmas of the mediaeval theologians which would have prevented the rise of capitalism had other conditions of the time been favorable. They did, it is true, forbid usury, that is, to use Dr. O'Brien's definition, "the payment of a price for the use of a sum lent in addition to the repayment of the sum itself." In other words, there was to be no charge for the "use" of money lent. But if the lender suffered any damage by making the loan—found himself in a worse position—then he was entitled to compensation in the form of interest. If the money was not paid back on the day it was due, it was lawful to exact a payment for the delay; and in practise loans were often made payable in a day or two with the understanding that there was to be delay and therefore interest damages for breach of contract. If there was a loss of opportunity to make a profit some other way, the lender could collect interest. If there was any special risk, the lender could exact something in addition to the principal of the loan. It was not unlawful to pay interest as an expression of gratitude for the favor. As business increased during the thirteenth and fourteenth centuries, the scholastics worked hard at interpreting the earlier doctrines, and long before Calvin was born they had established ingenious sanctions

for making capital accumulations and taking what amounts in fact to interest on loans. Calvin's famous letter on interest is important only to those who ignore the scholastics or neglect the evolution of their ideas.

V. When any capitalistic system is analyzed into component parts, it will be found that a certain intellectual climate, as well as technological conditions, is essential to its facile development. Concentrating on the production of goods for profit, capitalism calls for the predominance of secular interests in intellectual life, emphasis on science, business, government, economy, commerce and other related branches of thought. Using the state to maintain order, advance its enterprises in foreign markets and protect its most distant commerce, it requires a freedom of the state from entangling alliances with classes founded on landed possessions—landlords and clergy—a secular state separated from church and justified by secular performances rather than divine sanctions. Resting, at least in its early stages, upon the enterprise and labor of individuals rather than corporations, capitalism needs for its fruition an emphasis on individualism as distinguished from emphasis on the excellence of a settled order of classes such as held the center of the economic field in the Middle Ages. Making use of exact methods, especially as its technical equipment increases, it can live only in an atmosphere of mathematics and calculations, which happen to be at the same time indispensable instruments of the applied science that is so serviceable to capitalism. Buying and selling without respect to person and rank, employing talent wherever it can find that capacity, it thrives on democracy and equalitarian doctrines—the wider spread the better for trade. Finally a wide distribution of knowledge is also necessary for the extensive functioning of capitalism; the directing personnel must read and write; Charlemagne might be illiterate but the humblest factory manager cannot enjoy that luxury; working people must at least be able to read the rules and instructions; and the buying populace must be able to read advertisements if its wants are to be stimulated.

If such intellectual conditions are necessary to capitalist development, it follows that movements in ideas, either as the result of abstract speculation and dialectic processes or as the reflection of novel changes in material circumstances, must be taken into account in explaining the rise and development of capitalism. Now

among the intellectual movements that helped to usher in the capitalist age, the humanism of the Renaissance was the central feature. Although it was connected with the development of mediaeval commerce, it was not a product of that commerce; it was the recovery of a rich pagan learning. Above all it was secular, related to this world, justifying its ways and pleasures. And it must be remembered that humanism was a Catholic, not a Calvinist or even Protestant product: Protestantism hindered rather than promoted its development. Catholics were mistaken, perhaps, when they thought that they could play with Greek fire and yet preserve intact the closed system of Christian theology, but they took the risk nevertheless. Another aspect of Catholic thinking which contributed to the secular interests and individualism of capitalism was the nominalistic philosophy of the schoolmen. This philosophy regarded the world as a concurrence of persons and things and worked as a disintegrating force on the creed of realism with its theory respecting a framework of underlying reality appropriate to a rigid society. Ground between humanism and nominalism, the intellectual heritage of the Middle Ages was in process of disintegration before Calvinism came on the scene.

No doubt Protestantism accelerated this process in many ways. It intensified the old conflict between church and state, aided in the establishment of the supremacy of the state in Protestant countries, and lent countenance to sequestrations of clerical property which helped to decimate the clerical wing of the landlord class. It is true that for a time Protestant states maintained a public religion, but the multiplication of sects made the practise an object of attack and emphasized more and more the secular character of government. Yet we should be on our guard against attributing too much to Protestantism *per se*; for even in Catholic countries conflicts of one kind or another led to the dissolution of the Jesuit order, to sequestrations of clerical property, and finally to the separation of church and state. How far those operations were due to ideas that filtered in from Protestant nations or to the rise of the bourgeois among Catholics is a matter of speculation which historical research has not yet determined. Indeed the extent to which Protestantism was an economic movement is still the subject of animated debate among scholars. Yet when all pertinent facts are assembled and weighed, it will certainly be conceded that Protestantism

facilitated the secularization of the state, relaxed considerably the clerical control so useful to the landed classes, and gave the state a freer rein in creating conditions favorable to capitalism.

By the middle of the nineteenth century the supremacy of the state was firmly assured in all countries of western Europe; such remnants of state-church union as remained had clearly become anomalies to be eliminated in the course of the next few decades. The state was emancipated from scholastic economics, theories of the fixed social order and other doctrines appropriate to a society founded on status as distinguished from contract. The ground was thoroughly cleared for economic action by the state and for an economic philosophy of capitalism that viewed the state as a policeman keeping order for the owners of property.

In other relations Protestantism prepared the way for capitalistic economy. Under its influence the clergy, supported by landed foundations administered by clerical agents, practically disappeared; for the economically independent clergy it substituted a clergy dependent in the main upon voluntary contributions from the members of the congregation. In short the pulpit was subjected to the pew and inevitably took on more or less the thought coloration of the parishioners. At the same time the dictatorship of theology declined and the secular preoccupations of church goers deflected the stream of theological tendency. By the reduction in the number of holidays and festivals Protestantism released more time for productive labor, and by emphasis on salvation by faith rather than works it released more of life for the business of money making and wage working. Laying stress on the direct and immediate relation of the individual to God, it contributed to the individualism in thought and practise which served capitalism in obtaining its necessary supplies of entrepreneurs and wage workers. In praising the virtues of thrift, sobriety, promptness and industry, Protestantism facilitated the growth of a system of economy founded on monetary accumulations and regularity in productive processes. Grass may grow and sheep may graze if the peasant lies drunk under the hedge occasionally, but the wheels of mills cannot turn steadily if boiler stokers must have frequent debauches. A state of affairs calling only for amused comment in one set of circumstances becomes intolerable in another. The Puritanism of Protestantism served the promotion of capitalist enterprise.

Incidentally and apparently without calculation, Protestantism aided the cause of education, so essential to economy founded on exact knowledge. With a view to keeping their children loyal to their particular set of dogmas, the members of each sect early adopted the practise of teaching their offspring the rudiments of learning so that they could read at least the catechism and the creed. Faced by the disintegrating rivalry of Protestantism, the Catholic church adopted a similar practise. But having opened the gateway of learning, they could not set bounds to the outcome. The growing secular preoccupations of the age pressed through the portals of educational institutions. The high cost of sustaining religious schools led to the practise of asking for state assistance for education, and the rivalry of sects, which was increased by this action, contributed steadily to the secularization of educational control and the educational process itself. Where churches insisted on maintaining religious schools they were nevertheless compelled to adopt secular curricula to prepare their children for earning a livelihood in competition with children prepared by the public schools. By the middle of the nineteenth century even the religious schools were supplying boys and girls well enough equipped with secular learning to take part in industrial processes. At the same time the development of printing machinery and the application of power to presses made possible the publication of cheap books and newspapers, feeding secular and practical interest outside of the schoolrooms. Learning and the distribution of knowledge had passed beyond the control of clerical authorities.

Forwarding the same secular and individualistic tendency, the doctrines of natural right and equality, associated with the name of Rousseau, operated powerfully in the capitalistic direction. Defying divine right, advocates of natural right laid emphasis on man as an enjoying, producing and consuming animal, thus lending sanction and rationality to the creation and use of goods. At the same time the individualism affiliated with equality worked against old associations and fixed structures such as guilds and feudal ranks and in favor of freedom of opportunity for entrepreneur and laborer. It was in the name of Rousseau that the vestiges of feudalism were destroyed in France during the revolution, that guilds were abolished, and the way cleared for the bourgeois order of things. If that same equalitarianism made trouble for the bourgeois

later, its service as a stimulus to economic activity cannot be denied. As for natural right, it clothed in a realistic garb the undertakings of capitalistic enterprise which was nothing if not natural—employing the materials and powers of nature in the creation and distribution of goods with a view to earthly rewards.

The development of natural science, which ran parallel with the evolution of natural rights, besides contributing to the technical side of capitalism, also made profound alterations in the intellectual climate, adding features more favorable to that process. Lord Bacon, the father of the movement—to make an arbitrary break in an endless stream of thought—set an example to the coming generations by resorting to experimentation with natural phenomena and glorifying the application of this method to the creation of objects of utility. Bacon's work was advanced by Descartes who helped to break the dominion of authority over reason and made substantial additions to mathematics and physics. Turning from the earth, Newton applied the same mental processes to the starry heavens, discovering one law underlying the structure of the universe. In every department of science the idea of natural law was utilized with fruitful results. Carried into France, the underlying concepts of naturalism were made the basis of an immense intellectual effort, culminating in the *Encyclopédie*, and were employed in the intellectual manipulations that accompanied the triumph of the bourgeois in the revolution. Temporarily checked by reaction, this concept of a material universe subject to natural law flowered again during the opening decades of the nineteenth century, adding philosophic sanction to the production of goods while fertilizing the application of science to the same ends. Hence it may be said that mathematics, the rationalism rooted in its logical processes, analysis of the materials of the world through the aid of chemistry and physics, and belief in the universality of natural law, enriched the climate for the flowering of capitalism—itself the quintessence of rationality.

VI. While mathematicians, natural philosophers and physicists were at work developing the technology and intellectual climate favorable to capitalism, political events marched in the same direction. The Napoleonic wars dealt death blows to feudalism in Spain, Italy and Germany; Napoleonic decrees abolishing feudalism, sequestering clerical property, suppressing convents and wiping out interna' cus-

toms lines over wide areas of Europe, could not be permanently undone by the most vigorous reaction. In Germany Napoleon not only leveled hundreds of feudal principalities to earth and secularized clerical property; he prepared the way, through partial consolidation, for the unification of Germany, a condition prerequisite to the flowering of capitalism beyond the Rhine. Equally important in the same direction were the collateral consequences of his wars and policies. It was in girding herself for the war of liberation against Napoleon that Prussia, under the leadership of Stein and Hardenberg, abolished serfdom, created a popular army and called into life the ardent nationalism which later supported the Zollverein. Napoleon himself was a titanic rationalizer; his contributions to finance and banking, to the codification and simplification of the laws, to administration by technically competent officials, to military organization and supply, to the development of industries on the continent, to the construction of roads and public works, all marked him out as the child of his time—no divine Alexander or Caesar, as he himself once humorously remarked, but the genius of the age of reason, the forerunner of triumphant capitalism.

If the defeat of Napoleon was marked by a temporary and partial clerical and feudal reaction on the continent, it immensely facilitated the advance of capitalism in England. Through the additions of territory won by arms and confirmed at the settlement of 1815, Great Britain widened her trading empire and extended the markets for her manufactures. Enriched by the profits of twenty-two years of fighting, English capitalists now completely overpowered in wealth and effective power the landed aristocracy already heavily diluted by the infiltrations that had been going on since the seventeenth century. In the Reform Bill of 1832, extending the suffrage to these and other bourgeois, was registered the political outcome of irreducible economic fact. With the decline of the landed aristocracy went a decline in the clerical estate attached to its fortunes. If the universities still controlled by the Church of England clung to the classics and to religion, English thinking outside of the universities swung heavily over to utilitarianism, economy and naturalism; consider Bentham, the two Mills, Ricardo, Lyell, Darwin and Spencer. If the masses remained attached to the church, or to the evangelical sects, the prophets of the

new industrial order went in for rationality and skepticism. With her peasantry expropriated from the soil and her landed aristocracy subjected to mill owners and merchants, England passed into the stage of triumphant capitalism before the middle of the century, and thus led the world in that form of economy and in the development of the intellectual patterns and colorations appropriate to it.

On the continent, where temporary reaction restored the appearances of clericalism and feudalism, the forces of economic evolution made headway in spite of all attempts to erect the old barriers anew. Fifteen years after the Bourbons were restored they were finally expelled in the Revolution of 1830, which frankly established a bourgeois monarchy, supported by bankers and rentiers. When the banking aristocracy which sustained Louis Philippe refused to make concessions to the mercantile and manufacturing elements, it was overthrown in the February Revolution of 1848. By its very stubbornness it rendered impossible a smooth transition to simple bourgeois order and brought about a crash which awakened a new estate, the working classes, to political activity, threatening capitalism by a premature communism. Nevertheless, with the aid of the third Napoleon, the communistic danger was averted, the empire was restored, and conditions favorable to business enterprise were established. "Sooner or later war will have to be declared on the Americans," remarked Empress Eugenie to Napoleon III one day in 1853. "War, my love," replied the emperor, making a false prophecy, "is no longer possible in France; we are, so to speak, hemmed in by material interests and trade, which are all in all." To such a point had come the nephew of the great Napoleon who sneered at the English as a race of shopkeepers. The romantic age of the Bourbons had passed forever. France was on the way to the third republic.

In Germany and Italy the consolidation process so swiftly advanced by Napoleon I was completed shortly after the turn of the mid-century. It was in 1834 that the unifying Zollverein was inaugurated; thirty-three years later, in 1867, the North German Confederation was launched, to be completed by the addition of the south German states four years afterward. The theater was being prepared and energies released for a remarkable upswing of capitalism in Germany. It was in 1861 that Victor Emmanuel was crowned king of united Italy and in 1871 that his capital was moved to Rome. In

the meantime the Austro-Hungarian complex of states and peoples was being reorganized on a compromise basis and a vast territory prepared for unhampered trading relations. How far this state-building movement was the result of railways, improved roads and rising industries cannot be determined by economists, but there is no doubt that by enlarging the trading area, eliminating tariff barriers, facilitating the construction of railways for strategic reasons, political unification created economic and legal conditions favorable to the expansion of capitalism as against feudalism.

During these years of consolidation in central and southern Europe, domestic legislation, as well as wars and constitution making, aided the capitalistic process by eliminating various restraints of feudal tenures on the free movement of labor. As already indicated, in 1807, Prussia abolished serfdom by a decree designed to "remove every obstacle that has hitherto prevented the individual from attaining such a degree of prosperity as he is capable of reaching,"—a formula which would have suited Franklin and Calvin. By a law put into effect on July 1, 1848, serfdom was extinguished in Austria, and by an act of September 7, 1848, there was a sweeping abolition of feudal vestiges in that realm, in language which recalled the famous French decree of August 4, 1789. During the same revolutionary year, 1848, the serfs of Hungary and Croatia, under various laws and decrees, obtained "personal liberty." In 1861 Alexander II emancipated the serfs of the Russian Empire, thus carrying the liberation movement to the gates of the Orient. Although the abolition of serfdom destroyed the legal foundations of servitude it did not of course produce the same results everywhere; neither did it always give land to the former tenants or free them from charges in the nature of indemnities. But broadly speaking, it worked a revolution in agricultural economy and, what was more significant, legalized more or less the freedom of migration, national and international, so useful in supplying labor for capitalist enterprise.

Beyond the borders of Europe were occurring events hardly less significant for western civilization: the development and settlement of Australia, the opening of China and Japan to western commerce and intercourse, the penetration of Africa, the independence of Latin America and the exploration of distant islands of the seven seas. Across the Atlantic a new political power was rising on the world horizon:

the United States of America. During this period Louisiana and Florida were purchased, Texas was admitted to the Union, and war was waged with Mexico, ending in annexations that carried the borders of the country to the Pacific; in 1867 Alaska was purchased, with distant islands near the outposts of Japan. This period witnessed the triumph of Jeffersonian and Jacksonian democracy and finally, in 1865, the victory of capitalism and freehold agriculture over the slave planting system. American industries and agriculture furnished an outlet for the overflowing populations of England, Ireland and Germany; and wheat from American fields exerted a more powerful influence on European economy than the gold of the Spanish conquistadors. To the United States European political and social philosophers, such as de Tocqueville and Harriet Martineau, came to find illustrations and confirmations of their European predilections. A republic and a democracy, anticipating by generations the fate of Europe, America was both an inspiration and a menace to contending parties in the Old World. Neither the rage of Carlyle nor the meditation of Sir Henry Sumner Maine could leave the United States out of its sweep.

To add to this account of intellectual movements, political events and economic legislation, a description of the great inventions of the period under consideration would be a work of supererogation. Yet it may not be amiss to call attention to the fact that between 1800 and 1865 steam navigation was established and trans-oceanic lines opened to all parts of the world, railways were inaugurated and a network of lines spread over western and central Europe, and telegraphic communications began to be employed among all the great centers of commerce. Meanwhile improvements in textile machinery, the steam engine, iron-working equipment, and indeed the whole outfit of manufacturing, poured in such bewildering rapidity from workshops and laboratories that nothing short of an encyclopaedia can give an adequate impression of their number and importance. For our purposes their significance lies especially in the acceleration of the capitalist process as a productive and an accumulative operation, in the creation of capitalists and working classes, in the disintegration of feudalism as an economic and social relation, in the extension of rationalization over increasing areas of human activity, in setting fixed orders of society afloat—in short, revolutionizing the social and intellectual heri-

tage of the Middle Ages from the bottom to the top. Indeed it would be well to remember that during this period Justus von Liebig (1803-73) made his revolutionary applications of chemistry to agriculture, invading a field long dominated by rule of thumb, signs and omens, and bringing to rural methods and mentality the dissolving alchemy of rationality, supplementing the work of Stein in refashioning mankind's oldest work in the image of scientific capitalism.

VII. A transformation in economic and political arrangements so fundamental as that just outlined could not fail to produce novel patterns of thought and to bring about novel applications of inherited patterns. Naturally the center of intellectual interest was moved ever nearer to the new center of actual interest, capitalism and its system; and the conflict of ideas that raged around this realistic social structure and process spread to the uttermost borders of thinking, even into music and aesthetics. In beginning a survey of this intellectual revolution, it is well to recall that none of the participants were disembodied spirits, not even the cold-blooded scientists who so passionately announced their lack of passion. All of the thinkers in this period, as in all other periods, stood in some relation to the feudal order that was crumbling or the capitalistic order in the process of becoming. By family origin they were of feudal, capitalistic, mercantile or mixed ancestry, and in living and earning a living were involved more or less in the one system of economy or the other. Their education leaned either to the clerical and philosophical, on the one side, or to the practical and scientific, on the other. Some of them were, no doubt, more or less detached from their environment, but the detachment was a matter of degree, not of absolutes. If economics boasted of being a science of actuality, it is appropriate to remember that a large body of critics looked upon it as a defense mechanism for capitalism, and Karl Marx turned its leading doctrines to the ends of a communist revolution! When economists declined to answer questions respecting the evolution and outcome of their subject matter, on the ground that such inquiries were irrelevant, they were admitting limitations rather than improving the status of their science.

New conditions in England were especially favorable to the development of what may be called "pure economics," that is, thought about business untinged by clerical and scholastic

aspirations. In that country the feudal aristocracy was practically submerged under capitalism. Advancing far ahead of France and Germany in technology and large scale production, masters of the world market by virtue of their earlier development of machine industry, English capitalists needed no protective tariffs to save them from foreign capitalistic competition. Hence free trade was decidedly to their interest and in promoting it they were not compelled to make terms with the landed aristocracy; on the contrary, they could force free trade upon the country by their own action. Isolated by the sea and defended by the navy, they needed no standing army with its feudalistic heritage and mentality. Rejecting military aid as a defensive force against foreign countries, they could, with more logical consistency, reject it in domestic affairs. For these reasons, therefore, they had to make no serious compromises with feudalism or cameralism, and could go straight to the promotion of capitalism with fewer handicaps of heritage than their brethren on the continent. Practical interests, material circumstances and intellectual climate favored a concentration on "pure economics" as distinguished from "political" economy and an emphasis on the economic man in contrast to the man affiliated with a class order (*Standesordnung*). Thus temporary and local conjunctures gave to English "economics" a validity akin to that of natural science, at least in the minds of its creators and beneficiaries.

Realistic thinking about this order, that is, thinking undisturbed by metaphysical and clerical inquiries, was distinctly favored by the full-flowered development of English materialism. Hobbes, Locke and Hume had made immense contributions to this scheme of world interpretation, and as the eighteenth century turned into the nineteenth, Jeremy Bentham applied it to social phenomena in his *Introduction to the Principles of Morals and Legislation* (published first in 1789 and in a new and corrected edition in 1823). "Nature," he declared, "has placed mankind under the governance of two sovereign masters, pain and pleasure. . . . They govern us in all we do, in all we say, in all we think: every effort we can make to throw off our subjection will serve to demonstrate and confirm it. . . . The community is a fictitious body, composed of the individual persons who are constituting, as it were, its members. The interest of the community then is, what?—the sum of the interests of the several

members who compose it." Out of this theory of utility flowed Bentham's theory of political economy: "The business of government is to promote the happiness of society by punishing and rewarding." In other words, the function of thinking about society and its component individuals is a matter of calculation and balancing, akin in spirit to the bookkeeping operations of the counting house. To such a point had the materialist conception of life brought the speculative technology which the economists of capitalism were to manipulate during the first half of the nineteenth century.

In the field of theory four men—Ricardo, Senior and the two Mills—and in the sphere of practise two men—Cobden and Bright—developed the colorative system of capitalist philosophy into a logical structure of dogma, all within a framework of property conceptions rescued from the ruins of feudalism. Yet it is not easy to portray that structure, for it was composed, in part, of "iron laws" of rent, profit rate and wages, subjected to ruinous limitations and exceptions, and, in part, of moral aspirations quite foreign to the strict business of natural science. Broadly speaking, however, it consisted of the following parts: Society is composed of individuals, each struggling to avoid pain and to secure pleasure-giving goods. Where legal freedom of contract and of motion is allowed, the individual applies his talents and capital to the enterprise for which he is best fitted. Competition guarantees the survival of those who render economical services at the lowest price. Competition and rent regulate prices, profits and wages, so that each productive factor in society obtains a reward fairly apportioned to its deserts. Pressure of population keeps wages near the subsistence level, and the improvidence of the poor assures an abundant labor supply. Everybody is the best judge of what is beneficial to him, and by trusting to his instincts and reason can find the place in society to which he is best adapted. Attempts to control prices and wages are interferences with natural law, ruinous in consequences and bound to fail. The freedom that works so well within the state works equally well among states; under a regime of free trade each nation produces the goods for which it is equipped by nature—climate, soil and resources—and by talent; and a free exchange of goods among states results in the widest benefit to all, each party to the transaction receiving the most desirable goods at the lowest price. If private monopolies arise and control prices they

violate natural law; if trade unions make the same attempt to control wages they also violate natural law. As for the state, its duties are clear: its business is to protect property and to keep order, allowing the economic machine to function freely under its own momentum—the profit-making passion and the struggle for existence. Obviously this is a scholastic-Newtonian scheme of thought, founded on a fixed-order notion of things—not Hegelian and Darwinian, based on the concept of eternal flux. Indeed it was a fashion in the early years of the nineteenth century to refer to Ricardo as "the Newton of political economy."

Yet as a matter of fact, as Paul Rostock points out, Ricardo's iron law of rent rested on mobile factors—the progressive decline in the productivity of land, pressure of population on subsistence and the ruin of capitalists by the recipients of rent. Although Ricardo himself put off the evil day by reference to technology and improvements in agricultural economy, as Rostock continues, that was a subterfuge, not a square facing of his own logic; and had Ricardo been keener he would have been forced to inquire whether the landlords would go back to feudalism or use their rent to build a new capitalism, or whether labor would smash a system which brought ruin to great masses of mankind. If John Stuart Mill built his political economy on the same Newtonian order of thought he nevertheless privately did not believe in the irrefrangibility of his own system, as his autobiography conclusively shows. But by that time the latticework of "iron laws" was hopelessly shattered by criticism, and within a few years the editor of the *Encyclopaedia Britannica*, confessing that the once solid system of political economy was in ruins, omitted the subject entirely, offering in exchange a historical review of the theme which was notable mainly for its tone of melancholy resignation.

Although the Newtonian economics of the English classicists made some headway on the continent, both economic and political conditions rendered impossible such a complete intellectual victory there as occurred in England. It is true that some French and German thinkers took over the whole creed of Manchesterism; it is true that Napoleon III, first and foremost a theorist, who had lived long in England, coquetted with free trade doctrines; but the most influential of continental economists, such as Adam Müller and Friedrich List, worked in the direction of nationalism; and Napoleon III was

vigorously opposed in the French Parliament in his free trade negotiations. The reason is not far to seek. French industrialists demanded protection against the advanced competitors in England. Exigencies of national defense required the construction of railways and other public works with respect to strategy as well as economy. The struggle for unity in Germany and the popular revolt against Napoleonic power gave a national turn to economics that contradicted at many points the cosmopolitan materialism natural enough in English economics. Moreover the survival of feudal monarchies, such as that of Prussia, with their bureaucracies and cameralistic traditions, kept intact many barriers to the free play of bourgeois economic interests. It was by no means accidental, therefore, that List entitled his great work, published in 1841, *The National System of Political Economy*; neither was it due entirely to his long sojourn in the United States; the realities of life in Germany made the order-of-nature economics of the Ricardian school unworkable, if not unthinkable—certainly inappropriate—for a country that was not an island and was still governed by feudal estates.

VIII. From many angles the system of political economy favorable to the development of capitalism was brought under a fire of criticism and confronted by alternative schemes of thought, occasionally in the guise of natural science. Some of these criticisms flowed from the ideology of the feudalism which capitalism was supplanting—the *Standesideal* of the *Standesordnung*, characteristic of the agrarian, handicraft and mercantile economy of the Middle Ages. The vast literature of Catholic reaction which welled up after the storm of the Napoleonic wars comes almost entirely under this head. Only with difficulty could the Catholic church, which flourished best in agricultural countries and had long been supported mainly by landed endowments, bring itself to accept capitalism as a system of production, and never did it reconcile itself with the natural science, skepticism and utilitarianism of that order. One of the fatal mistakes listed in the *Syllabus of Errors*, issued in 1864, was the error that "the Roman pontiff can and ought to reconcile himself to, and agree with, progress, liberalism and civilization, as lately introduced." Idealizing the feudal relation in which superior persons protected and subordinate persons served, Catholic writers attacked the cold-blooded economy which en-

abled an employer to wash his hands entirely of all responsibility to labor, even in times of industrial crises when thousands were on the verge of starvation.

Nor was this type of thinking confined to Catholic writers. In England it was represented by the vehement Protestant-skeptic Thomas Carlyle. When the sources of his inspiration are explored and the types of his illustrations classified, it will be found that he was the philosopher of idealized feudalism. In praising aristocracy and crying down democracy he was celebrating the heritage of feudalism. In his *Past and Present* he contrasted the feudal ideal with the capitalist order around him. His hero Frederick the Great was a war lord who talked about serving his people. When Carlyle assailed capitalists he assailed them for not assuming toward their laborers the obligations of responsibility which a chivalric lord was supposed to have assumed toward his serfs. If he laid stress on natural inequality, it was not to assure Ricardo's capitalist an abundant labor supply but to emphasize the reciprocal duties of employers and employees which he conceived in mediaeval terms. Liberalism, democracy, laissez-faire, utility and the entire intellectual baggage of capitalism Carlyle looked upon as sheer anarchy, destructive to morals and hence impossible as the philosophy of a going society. "A high class without duties to do," he once exclaimed, "is like a tree planted on a precipice from which all the earth has been crumbling." Although he never pictured his reconstructed capitalism in concrete terms, Carlyle's teachings were certainly hostile to political economy as handed down by Ricardo and exerted a powerful influence on English social speculation during the period under consideration.

Carlyle's companion in arms, John Ruskin, combined the *Standesideal* of his friend with a passion for the aesthetics of the Middle Ages. To him also the materialistic teachings of political economy, its indifference to moral as distinguished from market values, were utterly abhorrent; for the liberalism of Gladstone and the conservatism of Disraeli he had only amused contempt; for the feudal ideal of subordination, reciprocal duties, just price and established quality he maintained to the end an unbroken admiration. To give the title "captain" of industry to a modern capitalist who lived well while his army was either miserable or starving from unemployment was to Ruskin scarcely short of sacrilege. If in his search for a remedy

for evils as he saw them he turned to a kind of state socialism, it was not because he had any sympathy with social democracy of the Marxian type; it was because he believed that capitalists themselves would not establish a system of moral reciprocities and that only the government could be induced to create the new social order. In itself that order, as sketched in the preface to *Unto This Last*, was a kind of feudal socialism in an idealized form. Moreover he emphasized in his scheme a phase somewhat neglected by capitalist economists, namely consumption, especially as a moral act. "Wise consumption," he insisted, "is a far more difficult art than wise production." Political economy, he contended, "consists simply in the production, preservation and distribution, at fittest time and place, of useful or pleasurable things." In other words, it is a science of making the natural order conform to mankind's moral and material needs, not a science of a natural order commanding mankind's obedient adaptation. Of Ruskin's great influence there can be no doubt; and in many ways he was more of a prophet—hence more scientific—than Ricardo or Richard Cobden.

With appropriateness and acumen capitalism was attacked in France by the scion of an ancient noble family, Comte de Saint-Simon, who had served in the American Revolutionary War and was proud of calling himself a soldier of George Washington. Although he made a fortune speculating during the French Revolution, Saint-Simon was never affiliated in work or thought with the capitalist process. In spite of his devotion to the idea of progress he clung to feudal concepts of economy and Christian concepts of social ethics; when he issued his comprehensive attack on capitalism and his program of socialism, he entitled it *The New Christianity* (1825). It was from the work of Saint-Simon that his pupil and disciple Comte derived the inspiration and general drift of thought which evolved into the positive philosophy and the grand sociological concepts associated with it.

In the same general class came the Swiss historian and economist Sismondi, who frankly confessed that it was not science but the observation of the distress caused by panics and pauperism—the disharmony of the capitalist system—which led him to attack it and to propose instead a cooperative order of society. Accused of being a conservative romanticist, looking back to the established order of old times, he freely accepted the characterization and made the most

of it. Of noble origin and classical training, he had little sympathy, practical or intellectual, with the materialistic economists, such as Adam Smith and Ricardo. Without attacking machine industry, he proposed to transform it in the image of the inherited moral order. It was as a prophet of this direction that he became an influential contributor to the development of utopian socialism.

Indeed it might be said with justification that the whole philosophy of utopian socialism, to be generalized from the works of Owen, Saint-Simon, Fourier and Sismondi, corresponded with strange exactness to the fixed order of the just price and established quality idealized by the mediaeval economists. None of the utopians accepted the idea of mankind as the helpless victim of economic laws; all of them insisted, on the contrary, on the possibility of creating an ideal moral order out of the materials at hand. If Owen clung to a curious kind of deterministic materialism, he entitled his utopia "the new moral world." If the utopians made use of natural science in their speculations, none of them ever surrendered to the Newtonian concept of an iron-law nature. All of their utopias were small colonies combining agriculture and handicrafts, assuring a minimum subsistence to the participants, production for use rather than for profit, and quality standards such as the old guilds were supposed to maintain. It would be almost safe to contend that the utopian socialism, so vigorously opposed to realistic capitalism, was at bottom a *Standesordnung*, borrowed from the feudal age and adapted to the technology of the early era of capitalism. Perhaps this may help to account for its transitory character and its failure as a practical force in the first half of the nineteenth century. Still it would be a mistake to underestimate its influence on social thought; it was one of the powerful intellectual currents of the age.

Another variant on the contemporary antithesis to capitalism and capitalist economics was Marxian socialism and Marxian economics, which should in truth be separated. Coming after utopian socialism had flowered in many forms and capitalist economy had found its Newton in Ricardo, Marxian economics was a clear fruit of both, nourished no doubt by the revolutionary events of 1848. Although Marx could hardly find words scornful enough to express his opinion of the utopians of every brand, he was familiar with their writings and derived ideas from them, perhaps even the most

utopian idea of all, namely that at the close of the capitalist period would be ushered in the final order of freedom for mankind. His collaborator Engels, who deserves more credit for the labors of the partnership than he has ever received, was not only acquainted with Owen's utopianism, but wrote for Owen's utopian paper, *The New Moral World*. Hence we cannot avoid the conclusion that both Marx and Engels were thoroughly saturated with utopianism—a scheme of thought strangely conforming to principles of scholastic economy. As Otto Rühle says in his *Karl Marx: Leben und Werk* (Dresden 1928; translated by Eden and Cedar Paul, New York 1929), "Paris was, at the time Marx lived there, a great melting pot full of socialistic and revolutionary ideas. There were to be found remnants of Saint-Simonism, ruins of Fourier's phalanx movement developed by Considérant, Christian socialism according to Lamennais, petty-bourgeois socialism in the variations of view represented by Sismondi, Buret, Pecqueur, Leroux, Vidal and others. At the beginning of the forties Etienne Cabet appeared in Paris again, after he had studied in England the utopianism of Sir Thomas More and the practice of Robert Owen" (p. 87 of German text). In the development of their economics, however, Marx and Engels used primarily the writings of Adam Smith, Ricardo, McCulloch and the classical school, and turned "iron laws" and materialism against the very system mirrored in and defended by them.

While making heavy borrowings from classical economics and utopian idealism, Marx and Engels also collected fundamental concepts from history, both written and observed. The idea of the class struggle, which they so extensively exploited, stood out firmly in the writings of Aristotle, Machiavelli, Harrington, Hobbes, Locke and many other social philosophers; and it was well known to thinkers in Europe and the United States, especially to the framers of the American constitution and defenders of it, like Hamilton, Madison and Gouverneur Morris. What they did not discover by study Marx and Engels learned by direct observation. "After the establishment of great industries," wrote Engels in his work on Ludwig Feuerbach, "especially at least after the European peace of 1815, it was no longer a secret to any person in England that the whole political struggle there turned on the quest for power on the part of two classes, the landed aristocracy and the bourgeoisie. In France, with the return of the Bourbons, the

same fact came to consciousness; the historians of the restoration period from Thierry to Guizot, Mignet and Thiers were unanimous in agreeing on it as the key to the understanding of French history since the Middle Ages. And after 1830, in both countries, a third contestant for dominion was recognized, the working class, the proletariat. Relations had so simplified themselves that anyone would have been compelled to close his eyes to escape seeing in these three great classes and the opposition of their interests the driving force of modern history; at all events, in the two most advanced countries." Students of history, Marx and Engels were subdued to a dynamic sense foreign to the Newtonian economics of the bourgeois; observers of contemporary political conflicts, they could not avoid seeing the inevitability of a social struggle even within the framework of a "natural order."

Besides approaching capitalist economy from the historical angle Marx and Engels looked at it through the intellectual structure of German philosophy, especially Hegelianism. As Germany did not shake off feudalism and clericalism with the same thoroughness as "the nation of shopkeepers," so it did not develop until the nineteenth century a school of materialistic thinkers comparable to Hobbes, Locke, Hume and Ricardo. In being more "reactionary," German speculators escaped the facile superficiality of the sensationalist school and combined mediaeval mystification with a profundity of thought not nourished in England. Perhaps, also, the political and armed conflict between France and Germany from 1793 to 1815 contributed not a little to the rejection of the materialism of the Diderot-Holbach direction. At all events German thought during the opening years of the nineteenth century gave a distinctive environment for the consideration of economic, social and historical questions. Marx, brought up on Hegel, could not by any stretch of the imagination see eye to eye with English economists of the natural-order persuasion.

In a passage of striking power Engels expounded the Hegelianism that counted so heavily in the Marxian formulation of political economy: "With Hegel the truth which had to be recognized in philosophy was not a collection of ready dogmatic propositions which, once found, would only have to be learned by heart; the truth lay in the process of cognition itself, in the long historical evolution of knowledge, which rose steadily from lower to higher stages

of cognition without, however, ever arriving, through the discovery of a so-called absolute truth, at the point beyond which it could not go, the point where nothing more was left for it to do except to lay its hands in its lap and stare at the absolute truth now attained. . . . Each stage [in thought] was necessary, therefore—proper for the time and conditions to which it owed its origin; however, it was untenable and unjustifiable with respect to the new and higher conditions, which were gradually evolved out of their own internal structures. . . . So this dialectic philosophy put an end to all ideas of a final, absolute truth and absolute human circumstances corresponding to it. Before it nothing stands as final, absolute, holy. . . . Nothing stands before this philosophy except the unbroken process of becoming and passing, the endless march from the lower to the higher, the mirroring of which in the thinking brain is philosophy itself.”

While it is true that Marx rejected the idea that history is the progressive revelation of the divine idea and boasted that he found Hegel standing on his head and put him on his feet, this intellectual and gymnastic achievement was not as revolutionary, from a philosophic standpoint, as Marx imagined. The Hegelian concept itself was the revolutionary element, a concept equally opposed to the *Standesordnung* of scholastic economists, to the natural order of the Newtonian world imagined by the classical economists of England and, if Marx had been daring enough in his logic to see it, to the positive socialist order to be established after “the death knell of capitalism” was rung. Such was the underlying dynamic of Marxian and Engelsian socialism, which possessed the philosophic validity inherent in Hegelianism, spread beyond the borders of economics into history, ethics and sociology, and when fortified by the Darwinian concept of evolution in the animal kingdom became a powerful intellectual force in the mid-century, both dissolvent and constructive, combining faith in the iron laws of nature with the divine hopefulness of the theologian.

IX. From still another angle, that of anarchy, capitalist economy was attacked, Proudhon, the poverty stricken son of a French cooper, taking the lead. Yet in many ways it was merely the extension of Manchesterism to a logical conclusion; the state should not even protect property and life; it should be abolished, and the free operation of natural forces, limited

perhaps by voluntary artificialities, would create the ideal order of things. Proudhon even went so far as to declare that domestic questions could be solved by a bureau of statistics, and that international questions could likewise be resolved by a bureau of international statistics. While there were elements of social control in his scheme, anarchy, the abolition of political dominion of man over man, was the goal which he set before him and the end toward which he thought society was moving.

More violent in temper and methods, still more clear-cut in his anarchist goal, was the Russian agitator Bakunin, who appeared on the revolutionary scene of western Europe during the upheaval of 1848. In his own words Bakunin summed up his attitude to classical economy and Marxism: “Marx is an authoritarian and centralizing communist. He wishes what we wish: the complete triumph of economic and social equality, however, within the state and through the power of the state, through the dictatorship of a very strong and, so to speak, despotic provisional government, that is, by the negation of liberty. His economic ideal is the state as the sole owner of land and capital, tilling the soil by means of agricultural associations, under the management of its engineers, and directing through the agency of capital all industrial and commercial associations.

“We demand the same triumph of economic and social equality through the abolition of the state and everything called juridical right, which is according to our view the permanent negation of human right. We wish the reconstruction of society and the establishment of the unity of mankind not from above downward through authority, through socialistic officials, engineers and public technicians, but from below upward through the voluntary federation of labor associations of all kinds emancipated entirely from the yoke of the state.” Illuminating this creed by more technical knowledge, Bakunin’s compatriot Kropotkin forecast an anarchistic society combining fields, factories and workshops in a single system of communal economy, decentralized and federated, employing no engines of state in direction and control.

An analysis of this system of thought shows that it unites in itself the natural order of the English economists carried to a logical extreme, the equalitarianism of the Rousseau school, and the hatred of the state common to despotic countries where the state was personified in an absolute ruler. From an economic and techno-

logical point of view it was pre-capitalist; that is, it rejected with the scholastics profit making as the prime mover of economic activities, and the society forecast by it was a simple combination of agriculture and petty workshops. When Russians visualized it they usually saw the Czar and the landed nobility swept away and the villages and handicrafts left intact as they had existed for centuries. It was built upon a localized primitive economy, not on a national order, to say nothing of international finance and exchange. Yet it agreed with classical economy in its faith in the excellent outcome of self-directed economic activities undisturbed by state interference. Perhaps its vogue and influence were due to its services to capitalistic opposition to state intervention rather than to the intrinsic power of its appeal as a system of thought.

A fifth attack on capitalistic economics came from the direction of nationalism tinged with socialistic ideas. Practically the work of bringing about political unity in Germany and Italy was entrusted by destiny to leaders of feudal affiliations; in Germany the Prussian state, in Italy the Sardinian state, took the leadership; in both countries the bourgeois, while desiring unity, hoped to effect it by constitutions rather than the sword and were, therefore, more or less in opposition to the actual process of national unification. Bismarck's troubles were with the bourgeois, not the Prussian landlords. In his conflict with the middle classes he even flirted with the fourth estate and cooperated with Lassalle in the formulation of policies. Springing from a landed family, serving the Prussian state, constantly struggling against the restraints of mercantile liberalism, Bismarck could not possibly adjust his mentality to the economics of Manchesterism. The use of the state for economic ends had been a historic practise in Prussia; Bismarck continued it. While socialism was a rising power, he helped to direct it against the bourgeois; after it grew into a menace he made concessions by furnishing instalments of state socialism. When Schmoller became a professor of political economy at Halle in 1864 and Wagner took up his duties at Berlin six years later, state socialism was already in the air, making German economic thinking well-nigh impervious to the reasoning of the Manchester school. That which seemed perfectly "natural" to Cobden did not seem "natural" at all to Lassalle, Bismarck, Wagner and Schmoller, and for reasons "natural" to both situations.

X. Passing outward from economics to the wider implications gathered under the head of sociology, we encounter the same operating forces of circumstantial reality and the same intellectual climate as the conditioning environment. Indeed it is difficult to distinguish sociology from economics on the one hand and from socialism on the other. Comte, who may well be called the founder of the discipline, was a disciple of Saint-Simon, the French utopian socialist; and yet he was at the same time a student of the natural sciences and the naturalistic philosophy which had furnished nutriment for classical economics. His concept of the three stages of social evolution—theological, metaphysical and positive—reflected with striking precision the scientific assurance of his period; and the outcome of his sociology, an ideal society tinged with religion, was appropriate to a thinker early trained in the utopianism of Saint-Simon. Yet by escaping the iron laws of Newtonian economics Comte came more nearly to forecasting the trend of social thought and practise than did his contemporary Herbert Spencer. By emphasizing the contention that neither economic nor political reorganization would alone lead to the goal indicated by social evolution, and by laying stress on intellectual readjustment and universal education, he helped to rescue both politics and economics from the sterility of mathematical inevitability so attractive to the classical economists and the Marxians. More than that; in spite of his vagaries, he widened the periphery of thinking about human society, gave a certain social wholeness to speculation about it, and, by pointing out the synthetic character of modern civilization, helped to prevent an overemphasis of ideas or facts.

It was the breadth of view which characterized Comte, no less than his vagaries, that led the English rival Herbert Spencer to declare that his chief debt to the French sociologist was negative. Spencer's resistance to Comtism was the opposition of a practical and confirmed exponent of Manchesterism, classical economy and materialistic science. In explaining "how little influence Comte's teachings have had on scientific thinking in England," Spencer said with a certain air of hauteur: "Those whose education has been mainly literary are unable to realize the mental attitude of those whose education has been mainly scientific—especially where the scientific education has been joined to scientific tendencies and a life of practical

science continually illustrating theoretic science, as in my own case." In this single sentence Spencer revealed his strength and weakness. Here is the strength of Cartesian mathematics, Newtonian physics, Ricardian economics and Darwinian materialism; here is the weakness of a mind which imagines that the kaleidoscopic motions and emotions of life can be covered by statements akin to chemical formulae in exactness. It was in this spirit that Spencer, a child of the utilitarian age, applied, after a fashion at least, what purported to be rigid canons of thought to the origins of religion, to the rise and development of ceremonials, to social, military and industrial institutions, and to current political practise. The range of his influence was proportioned to the dominance in various countries of the modes of life and thought which he represented; and his work ran the full gamut of scientific expressionism throughout the world. Even if it had not been given the powerful aid of Darwinism its pressure in the currents of thinking would have been immense.

XI. Through the historical writing, no less than through the economics and sociology of the period, rang repercussions of the great political and economic struggles of the age, making necessary many adjustments in the heritage received from the preceding epoch. In the pages of the English historian Macaulay could be traced the long conflict between the capitalistic and landed classes in England and the evolution of their associated ideologies. The passing of the military caste in the island kingdom and the rapid advance of parliamentary government favored the cultivation of research in political institutions, which finally flowered in 1873 in the publication of the first volume of Stubbs' *Constitutional History of England*, the progenitor of a long series of institutional studies. Although the general outlook was widened by Buckle, whose *History of Civilization in England* (published in 1857) aroused a sensation in two hemispheres, it was found on examination that his structure of thought had been reared on economic Manchesterism and the hypothesis of materialism, and reflected current political and theological controversies. Across the Atlantic, in the United States, the Democrats found their historical oracle in George Bancroft (trained in Germany), who united some of Hegel's dynamics with the optimism of Jacksonian democracy; while at the same time the past was recon-

structed for the Whigs by Hildreth, a scholar brought up in the federalist school. In France the historical works of Thiers, Guizot, Thierry, Mignet, Lamartine and de Tocqueville bore deep traces of the controversies which had shaken France since 1789, the new social ideas which stirred Paris to a socialist revolt in 1848, and the contests which the respective authors witnessed. Indeed most of the French historians were statesmen or politicians and mingled the emotions of the forum with the ratiocinations of the study. Their great theme was the justification or condemnation of the upheaval of 1789 with corresponding pertinence to contemporary issues.

If German historical scholarship appeared to be more thorough and more profound it by no means escaped the impacts of the day. In the dark hour of humiliation at the hands of the first Bonaparte, German nationalism, personified best perhaps in Fichte, girded itself as a young giant, making use of universities and all disciplines of thought to strengthen the state for liberation and to inspire the masses with confidence in their native powers. As Cunow says of von Maurer, this school of thought sought in the German past for the secret of a better future; here is the root of the Teutonic theory of racial genius which dominated so much of German thinking of the nineteenth century and passed swiftly into England (a partner of Prussia in the destruction of the Latin Napoleon) where it exfoliated richly in the works of Palgrave, Kemble, Freeman, Stubbs and Green; and then leaped the Atlantic to Johns Hopkins University where it made a powerful impression on a generation of American historical scholars between 1876 and 1900. Besides developing inquiries into Teutonic origins, the German historians of the period, taking note of the struggle for parliamentary government raging on every hand, also laid great emphasis on institutions; hence the monuments of erudition erected by Waitz, von Maurer, Brunner and Gneist, which were so assiduously studied across the channel by English contemporaries. Although Ranke announced a new ideal when he declared it to be the business of the historian to see things as they actually had been, his underlying philosophy was more akin to the faith of Martin Luther than to the materialism of the French and English philosophers (Friedrich Meinecke, *Die Idee der Staatsräson in der neueren Geschichte*, Munich and Berlin 1924, p. 471). After Hegel struggled through the phenomenology of the spirit and the

philosophy of history he came out with an apotheosis of the Prussian monarchy!

From a strictly scientific point of view the most important achievement of the period was the beginning, in various countries, of great collections of documentary and source materials and the foundation of scholarly journals for the publication of minute researches, thus undermining in detail the huge structures erected by the generalizers of the epoch. But it could scarcely be said that this new documentation exercised much influence on the histories of the period done in the grand manner—the histories that made the deepest impression on social speculation and practise. “Scientific history,” claiming a kind of disembodied emancipation from temporal affairs and general ideas, belonged to the future; thousands of doctoral dissertations and specialized studies were to prepare the way for its short-lived triumph near the close of the century.

XII. With respect to the political theory of the period under consideration, the four points of the compass were: the individualistic anarchy of Bakunin and the socialist dictatorship of Marx, the capitalist-constable state of English Manchesterism and the feudal-police state of Prussianism. All other schemes and themes were but variations from these four types of opinion. Whoever starts on a journey through the tangle of political speculation must take his guidance from these fixed points of observation. It matters not whether it is the theory of Fichte, Ranke, Schelling, Hegel and Treitschke, heavily laden with learning and philosophy, or the laborious periods of Karl Marx fusing German ideology and English capitalistic experience, or the dogmatic assertions of Bakunin, or the reasoning of Herbert Spencer's *Social Statics*; the animus is there and the Q.E.D. of the syllogism is implicit in the assumptions of the first assertion. The political thinking of the age mirrored its realities, with their varied gradations and circumstances. Having long served as a shield of defense for a prevailing order or a foil of attack upon some dominant arrangement in politics, political theory did not emancipate itself from its heritage. If there could be a science of politics akin to the science of physics, no philosopher of this period discovered it.

Perhaps the nature of what passed for “scientific reasoning” respecting the state during the epoch can best be illustrated by the following propositions advanced by Spencer: “Every-

thing in nature has its laws. . . . As with man physically, so with man spiritually. . . . Mind has its laws as well as matter. . . . As with man individually, so with man socially. Society as certainly has its governing principles as man has. . . . Analogy shows us that they must exist. . . . The laws of society are of such a character that natural evils will rectify themselves by virtue of a self-adjusting principle. There follows the inference that it is needful only to maintain order—that the function of government is simply to defend the natural rights of men—to protect person and property—to prevent the aggressions of the powerful upon the weak—in a word, to administer justice.”

Far less tenuous in its thinking was the school of historical jurisprudence founded by Savigny and his generation of German jurists. Two special features of their field saved them from the vagaries that plagued speculation in politics. The first was the logical and almost artistic perfection of the Roman law which they made the object of such profound and affectionate study. Compare, for example, the *Corpus juris* exploited by Savigny with Machiavelli's *Prince* so assiduously cultivated by Hegel and Fichte! The second was the practical requirements of their profession which held the lawyers nearer to the business of living and working. The first half of the nineteenth century was a period when the old confused laws of feudal relations were being transformed to meet the exigencies of modern economy and codified for the convenience of legislators and practitioners. Echoes of the Code Napoléon reverberated through Germany and Austria to Budapest and Belgrade on the far banks of the Danube. It should not be forgotten that Savigny, besides being a professor in the University of Berlin, was also a politician, a Prussian official from time to time, and above all minister for the revision of legislation from 1842 to 1848. Doubtless experience as a public official or legal draftsman would have altered the angular political theories of Fichte, Marx, Bakunin and Herbert Spencer, bringing them more near to the inevitable course of things. Historical jurisprudence was a powerful corrective to loose political speculation, a useful guide to exact thinking about social relations capable of legal definition, a check on facile hopes and, equally, on facile aspirations for a return upon the past.

XIII. Strangely involved with all the events and disciplines reviewed above was the doctrine

of evolution associated with the name of Darwin, including all its implications for anthropology, psychology and social science. "Involved" is the just word, for besides exerting a profound influence on all departments of thought, Darwinism was a product of this age—the age of early capitalism, materialism and sharp social conflicts. In fact, Darwin himself confessed that while he owed much to his observation of the struggle for existence in the animal world, the idea of natural selection came to him after reading Malthus. In a letter to Haeckel Darwin wrote: "Having attended to the habits of animals and their relations to the surrounding conditions, I was able to realize the severe struggle for existence to which all organisms are subjected. . . . With my mind thus prepared I fortunately happened to read Malthus' *Essay on Population*; and the idea of natural selection through the struggle for existence at once occurred to me." And what was the essay by Malthus? A cold, scientific study originating in the passionless pursuit of truth? On the contrary, it originated as a political and social tract to combat the "dangerous" social doctrines of Godwin. Thus inspired in part at least by a class controversy appropriate to the age, Darwinism naturally lent sanction to the tooth-and-claw struggle of Manchesterism, to the individualistic gospel of early capitalism.

At the same time Darwinism was the logical outcome of a line of scientific research and thinking which ran far back into the eighteenth century, to say nothing of Greek and Roman concepts of biological development. It was foreshadowed in the work of Buffon, Erasmus Darwin and Lamarck. It was worked out to some extent independently by Alfred Russel Wallace. Its advance was promoted by the geological investigations of Hutton and Lyell, the botanical studies of Linnaeus and the innumerable researches of specialists in Europe and America, not overlooking the debt to Asa Gray of Harvard, so generously acknowledged by Darwin himself. All the thinking of the age respecting plant and animal life was subject to the pressures of contemporary natural science and finally eventuated in the *Origin of Species* published in 1859. Inevitably this feverish scientific research forced its way into speculations respecting the origin, development and destiny of mankind. All those who thought widely in that period were profoundly affected by the influences which produced the doctrine of natural selection and survival of the fittest.

Darwin's second great work, *The Descent of Man*, although it did not appear until 1871, was likewise a product of this age, especially of anthropology as developed by the inveterate German traveler and student Bastian, his Marburg compatriot Theodor Waitz, Haeckel at Jena, Canestrini and Barrago in Italy, Lubbock, Tylor, Spencer and McLennan in England. And this anthropology itself was in no small measure the fruit of the commercial and exploring age, of innumerable voyages opening up the most distant and backward places to travelers and observers, of continuous traffic and intercourse between Europe and all quarters of the globe. By swift clippers and later by steam vessels, merchants, naturalists and curiosity seekers, as well as preachers and priests, sailed for all known parts of the earth; secular observers supplemented the reports and interpretations of missionaries, breaking down the limited, parochial views of western Europe and bringing to bear upon social thought a wide knowledge derived from the study of human societies in all stages of development. Like a gust of fresh air anthropology swept through the social speculation of Europe burdened by thirty centuries of limited and traditional theorizing concerning the nature of man and human society, thrusting new ideas into the European heritage and into the rationalizing processes of a period beset by social conflict. Though thrown for a time into violent collision with theology, the new science of anthropology made steady headway as the most emancipating discipline of the epoch. World travel, world geography, world geology and world anthropology were doing more to reveal the nature of man to himself than all the fine-spun speculation that had been accumulated by the opening of the nineteenth century.

XIV. If from departments of knowledge, which are after all highly fictional divisions, we turn to the great ideas of the period which penetrated all branches of thought, we find that they may be conveniently summarized as follows:

State ideology, developed around the Prussian monarchy, especially by Fichte and Hegel, in a time of national uprising against Napoleonic domination and advancing to the state socialism of Bismarck, Lassalle, Wagner and Schmoller.

Nationalism, promoted particularly by the struggle for unity in Germany and Italy.

Anarchy, or the negation of the state, in the decidedly limited form of Manchesterism and the logical and violent form of Bakuninism.

Proletarian socialism, erected into a system by Marx and Engels, and projected on the political stage with the founding of the first International in 1864.

Evolution, from the universal flux of Hegelianism to the systematic naturalism of Darwin, working widely in all departments of thought.

Materialism, with antecedents running back to the Greeks, especially promoted by the philosophers of the eighteenth century and the natural scientists of the nineteenth century, reaching pontifical assurance in the work of Büchner.

Christian ideology, the ethics of the fixed

order, with the scholastic theory of just price and just wages as its essential economic creed.

The idea of progress, launched by Abbé de Saint-Pierre early in the eighteenth century, exploited by Saint-Simon in a socialist direction, by Spencer in the individualist direction, and taking its place finally as a kind of Providence in skeptical circles.

Out of such ideologies, composed of many strands and formulated with varied illustrations, was woven the social thought of the first half of the nineteenth century, a part of the heritage with which all must work in our day.

CHARLES A. BEARD

X

Nationalism

The great changes in social and political thinking during the generation following upon the last years of the sixties remind one of a famous passage in that standard source of the history and psychology of liberalism, the *Autobiography* of John Stuart Mill. The author relates (ch. v) how, through an involved and painful process just after the completion of his twentieth year, he became aware of all the cruel one-sidedness of that extraordinary and precocious education bestowed on him by his father, and how it dawned on him "that the imaginative emotion which an idea, when vividly conceived, excites in us, is not an illusion but a fact, as real as any of the other qualities of objects; and far from implying anything erroneous and delusive in our mental appreciation of the object, is quite consistent with the most accurate knowledge and most perfect practical recognition of all its physical and intellectual laws and relations."

What happened so early in one man's short lifetime, it took the mass of liberally educated European and American thinkers several generations to discover. For a while the ideas of French materialism and English utilitarianism seemed about to flood all civilized mankind with the standardized harvest of their social and political convictions and habits. But precisely at this time the tide began to turn slowly, yet steadily, and ideas and conceptions that appeared to be "illusions," dead and gone, began unexpectedly to make themselves felt as "facts."

If one tried to find a broad preliminary formula indicating the chief lines along which this change affected the social sciences, one might say that the simpler and more vulgarized the liberal doctrine of government and society became, the more it was in danger of being overcome on both its wings by two forces that had been its dangerous critics almost from the outset. One of these was the "organic" conception of social growth first strongly voiced by Burke and the teachers of the Restoration. The other was the "socialist" interpretation introduced by the great English and French pioneers in this field. It is surely not without significance

that the political development of the leading capitalist countries was marked, during this period, by constitutional readjustments of a closely parallel nature. In 1867 Disraeli's second election reform enfranchised the great mass of the urban working classes on whose support "Tory democracy" relied against liberalism. The same year Bismarck, on the advice of Ferdinand Lassalle, made an even bolder stroke in the same direction by incorporating in the new constitution of the North German Federation the same demand for complete universal suffrage that had been made during the Revolution of 1848. Finally what else is the meaning of the reconstruction period in America's history but a similar alliance of Republican conservatism, and even imperialism, with an overwhelming majority of the toiling masses who had been, a generation before, the main support of Jacksonian democracy? It is true that in America and still more in Europe, where socialism started directly organizing its own parties, the conservative-socialist alliance could only be either a passing event or a recurring ideal. But as such it had immense influence in weakening and modifying the hold of liberalism on the modern world.

One of the first prominent results of this influence was the rise of a new nationalism. From the point of view of revolutionary France and of English Liberal world politics, national aspirations had been valuable only in so far as they tended to promote the growth of democratic government throughout the world or, to put it in terms of realistic political sociology, in so far as they furnished natural supports for the French and English governments of the period. And, correspondingly, it was found that in German and Italian movements toward national union the cosmopolitan leadership of the bourgeoisie and the intelligentsia far outweighed the influence of more radical and nationalist forces that came to the fore only in times of revolution and of war, and were dismissed again after successes as well as after failures. In contrast to all this, the epoch of the sixties is characterized, on the one side, by the definite victory of the

young German and Italian national governments, accomplished more or less directly at the expense of the last French monarchy; and, on the other side, by the menace of the Russian Empire and of the new eastern nationalism that raised a multitude of disruptive forces in the shape of "nationalities" in the Austro-Hungarian monarchy. The effect of the Franco-German War was not only to complete the eclipse of France and Austria-Hungary but also to complete the union of Italy and to abolish the limitations of Russia's naval power in the Black Sea, thus enabling her to unloose immediately the nationalist forces of the Balkans against the Turkish Empire. The new nationalism was not confined to the continent of Europe. In the England of Disraeli it took the form of that imperialism which not only gave India the imperial name and occupied Egypt but definitely halted the "Little England" spirit in favor of a creative development of the dominions based on self-government and a new consciousness of British racial community.

Second in order of time, though hardly of importance, were the economic implications of the new nationalism which have made the historians call the close of the century the neomercantilist age. In a very significant way the fundamental policies intended to inaugurate an age of shrinking tariff frontiers and of ever widening free trade, produced results exactly the opposite of those intended. The great "most favored nation" treaties between France and England (1860) and between France and the German Zollverein (1862) were equally unsuccessful, the first provoking the economic discontent that brought about the overthrow of the Second Empire, the second showing by the consequent ejection of Austria from the Zollverein the double edged workings of free trade inside and outside the areas of commercial treaties and customs unions. With but slight variations, such as the Morrison tariff in the United States and the Caprivian era of commercial treaties in Germany, the spirit of the period thus grew strongly and increasingly protectionist. There were other developments in the economic history of the time, such as Germany's social insurance, Russia's state railways and France's colonization activities, which recalled the economic leadership of governments in the mercantilistic states of the sixteenth, seventeenth and eighteenth centuries. Even in England the last great remnant of mercantilism had scarcely disappeared with the dissolution of the East

India Company (1857) when the new imperialism unconsciously went back to the Elizabethan models of state monopolized organizations of foreign trade in the creation of the big chartered companies of Cecil Rhodes and his African rivals.

All this was to prepare the way for startling transformations. The capitalistic economy which had so triumphantly spread with the destruction of the older mercantilism and the advent of the free competitive market in commerce, industry and agriculture was on the verge of reaching that new and different stage which has been described as the "high capitalism" of the twentieth century. A new and unheard of development of machine production, financial organization and marketing technique began to evoke new and unheard of economic forces, mostly in new places. An age of steel, instead of iron, dawned after the experiments of Bessemer, Kelly and Holley in America, and of Thomas, Gilchrist, William Siemens and Martin in England. In the later years of the period the perfection of the basic process shifted the center of European steel production from England to the German furnaces fed with the phosphoric ore of the newly acquired province of Lorraine. In precisely the same manner the new era of electricity was born and fostered in the laboratories of Werner Siemens and Emil Rathenau, and the analytical chemistry of coal was inaugurated by the scientific exploits of German universities and technical high schools. Lastly the growing volume of business was taking production and marketing out of the range of the individual entrepreneur, who had been the dominant figure of the competitive economy, and was leading it on to new forms of organization essentially monopolistic in character but as varied in appearance as German government-protected syndicates and American trusts struggling, successfully indeed, with a theoretically free-trade judiciary and legislation.

This tremendous expansion of productive powers was possible only in connection with the new movements of population. One who wishes to understand more than superficially the socialistic side of the neomercantilist epoch must keep his eye on the adjustments that took place in population. The nationalist fermentation of Italy and eastern Europe furnished the United States with the "new immigration" needed to supply its expanding business with cheap and docile masses of raw labor. The same effect was produced in Germany by an extensive process of

internal migration from the agricultural north-east to the centers of industrial production in the west, drawing in its wake a corresponding immigration, temporary or permanent, of still cheaper agricultural labor from Russia and Austria. Karl Marx and Friedrich Engels were not mistaken in applying the experience they had had of earlier English capitalism and the lessons they had learned from English trade-unionism to the new economic and political situation of their native country. In America radicalism took the form of agrarian movements like the free-soil and free-silver agitations.

Now when we remember that the social sciences represent the self-consciousness of society, and that political economy is the oldest and most developed among them, it is not surprising that we should find the structural changes of the society of the epoch most exactly mirrored in the new and very decisive turn taken by economic thought. After the disintegration of Ricardian teaching, brought about quite as much through popularization as through heterodoxy, the time was ripe for a reconsideration of that great body of doctrine called the "classical economics"; and in the sixties English, Austrians and Germans were busy laying the foundations of two huge new wings to be added to the old building on each flank; namely marginal economics on the one side, and the historical school on the other.

It is possible to interpret marginal economics as a reaction against the deadlock to which the classical theory of cost value had been brought by Karl Marx's powerful exposition of labor costs and the surplus of exploitation. Indeed one of the three founders of modern marginalism, Marie Esprit Léon Walras, was through his own father a direct heir to the typical kind of mathematical price theory which the French bourgeoisie had tried to set up in defense against the socialism of Proudhon. But surely if there had never been any French or German socialists, classical economics would still have reached a stage where it would have been in urgent need of restatement. That stage was marked by the passing of the limited period which, in the words of John Maurice Clark, "began with the breakdown of the mediaeval guild restrictions and ended with the growth of industries using large fixed capital." It was only during this period that economists could have been satisfied with the simple concept of value and price as being directly determined by elementary factors employed in the production of commodities. With

the advent of "large fixed capital" production, economic analysis had to fall back upon an earlier and more general, if less simple, aspect of the market, where the ever changing equilibriums of supply and demand would end in the apparently contradictory phenomenon of costs determined by prices. In fact the simultaneous inquiries which in the early seventies reconquered from oblivion the eighteenth century device of marginal analysis as an application of the differential calculus to economic reasoning, were only historically different approaches converging upon this goal of a new "subjective" theory of value and prices. William Stanley Jevons stands, as it were, in the middle, continuing, despite all his opposition to Ricardo, the old utilitarian tradition of the classical school, and so paving a way to the ultimate reconciliation reached by Alfred Marshall and F. Y. Edgeworth early in the nineties. On one side of Jevons, Walras, with the mathematician's aloofness from both realistic and psychological treatment, exerted a sobering influence which resulted in a *risorgimento* of Italian economics rather than in any more marked effect on France herself. On the other side, Karl Menger bequeathed to the Austrian school, of which he was the founder, that subtle but unmathematical psychology which in his country was a heritage of the best of Catholic scholasticism. There also were remarkable crossings and blendings among the three national streams, such as Auspitz' and Lieben's mathematical theory of prices, or Fisher's *Mathematical Investigations in the Theory of Value and Prices*. Correspondingly strong differences inside the national schools came to the fore. In Austria, for instance, the new method was used to attack the more complicated social problems of distribution, so that Menger's school after 1884 was more or less openly split into the more radical group committed to Eugen von Böhm-Bawerk's time theory of interest and the more conservative group inspired by Friedrich Wieser's conceptions of social productivity. Finally in Sweden Knut Wicksell prepared the return to an "objectivism" later perfected by Gustav Cassel, while American economics succeeded in keeping a rather independent position in which the English inheritance was tempered by the early influx of Austrian teaching chiefly by way of Smart's translation of Böhm-Bawerk's volumes on interest. But John Bates Clark's *Distribution of Wealth*, the outstanding work of the close of the century, evoked in support of its marginal pro-

ductivity theory the memory of the great German pioneer of the doctrine, Johann Heinrich von Thünen. After the model of the Verein für Sozialpolitik, founded in 1872, the American Economic Association tried, as in Edwin R. A. Seligman's early work on the theory of taxation, or F. W. Taussig's on the tariff, to connect theoretical economics with economic policy. On the whole America was the only country outside of Germany to do justice by the second most important movement of modern political economy, the German historical school.

It has been the fashion for some time to draw a rather sharp line between what used to be called the older and the younger historical schools of German economists. The former has been identified with the names of Roscher, Hildebrand and Knies; the latter, with the name of Schmoller; and the line of distinction has usually implied a "value judgment" of some sort on the superiority of the former as compared with the latter. Now there is indeed much to separate those older writers from later historical teachers and economists. Although on the surface they seemed as hostile to English classicism as the German university "cameralists" had been ever since Adam Smith's time, they had really a great deal in common with their English post-Ricardian contemporaries, being genuine philosophical liberals with a fairly marked theoretical interest. This is precisely the reason why the historical school did not exert its main force until this generation had passed and the group led by Schmoller took its place. In spite of the famous "battle of methods" between him and the Austrians in the eighties, Schmoller's service to economics in the new German Reich was more closely akin to the new departure of Menger's subjectivism than one might expect. It was another part of the great reaction that had set in against the one-sidedly deductive methods of orthodox utilitarianism and that had been philosophically led on in England itself by the inductive logic of John Stuart Mill. In fact there is the same craving for realism, after an age of self-satisfied "pure" reasoning, in the opening pages of Menger's *Principles* as there is in Schmoller's contemporaneous work on the small crafts in Germany; and their difference, if momentous, is less in the ulterior aim of economic research than in the theoretically rather careless belief in factual inquiry that made Schmoller and the other founders of the Verein für Sozialpolitik disinclined to wait with Austrian patience for

theoretical solutions of the social problems of the new Germany. That Schmoller was as little of a government economist as his Austrian colleagues, who in many cases served their government even in official cabinet positions, is proved in part by his campaign against the social aloofness of Treitschke, the official historian of Prussianism. His position is even more clearly indicated by the fact that both he and his associates in what their opponents called *Kathedersocialismus* were deeply influenced by the constructive side of the spirit of the great German socialists. Instead of viewing the historical school, as is too often done, exclusively in the light of Schmoller's latest period—the period of extensively organized research in the process of Prussian history that really belongs to the succeeding century—one ought to think not only of Schmoller in his entirety but of the whole breadth and depth of the work done in a spirit of friendly rivalry, and not seldom of opposition too, by the other masters of "historical" economics in Berlin, Munich, Strasbourg and Halle. There was Adolph Wagner, most theoretical and (scarcely by coincidence) most radical of all, who in the wake of Karl Rodbertus sustained social criticism on the basis of the Ricardian theory of rent. There was Lujo Brentano, convinced free trader, who yet gave the English the first theory of their trade unions. There was Georg Knapp, historian of agricultural emancipation, whose state theory of money comprised a century's experience of managed currencies. And, lastly, there was Johannes Conrad, whose eminence as a teacher has left a considerable impress even upon many non-German countries, especially America, where he sent Patten to revive the protectionist ideas of Carey. On the whole, although the training of most of the older American economists in the German historical school may have actually had only a slight influence upon them, and the thought of men like Emile de Laveleye, Charles Gide and Emile Levasseur in Belgium and France was at that time certainly much more akin to the German than to the American spirit, there is probably no escape from Schumpeter's conclusion that the deepest meaning of the German effort has nowhere been better resumed and perfected than in the empiricism of the American institutionalists of our day.

It must not be forgotten that since the days of the physiocrats and of Adam Smith there had been a tendency to regard the other social sciences as an outer group circling about the

specialized and segregated science of political economy. Compared with what their state had been in the eighteenth century, their growth had been rather retarded by the concentration of public attention on their "dismal" sister. And not until the latter, with the increasing want of historical and realistic treatment, was again reminded of her more general social backgrounds, could there be sufficient interest created in the progress of the sister branches that were to clear up those backgrounds. Naturally the triumphant development of economics forced itself for a long time upon these other branches as a model of "exact" science. They had only to go one step further back to find the model of the natural sciences that had been so suggestive to economics itself. Thus, while much of the economic work of the period was in rebellion against the older types of the mechanical concept of society, this concept was far from having lost its influence over the rest of the social sciences, and some of the best work done by them could never have been achieved except with the help of naturalists and naturalist thinking.

This is of course especially true of those aspects of social life which are conditioned by the more or less pure physiological data of human nature and its surroundings. These data had from the eighteenth century onwards been viewed preeminently in the light of the individual *homme machine*. With the advance of socialism their significance came to be regarded more and more from points of view that transcended the individual and that were represented mainly by the two great biological doctrines of evolution and of the social community. As to the first, Darwin's mechanical theory of natural selection remained supreme at the close of the nineteenth century, and its application to social problems of history and politics fascinated the philosophers. As to the more markedly social and contemporaneous manifestations of human life, naturalism seemed to lend itself to yet another and still more important series of conclusions. It furnished the basis of that "materialism" which the German socialists caught at so eagerly as definite proof of the hegemony of economic conditions in society and of the complete dependence on them, as a half illusory "superstructure" (*Ueberbau*), of the whole realm of cultural, moral and religious values.

Against this general background the history of the several social sciences during the period naturally follows the most diversified tendencies. The large comprehensive science of social rela-

tions that had been attempted by the Saint-Simonians and by Herbert Spencer under the much criticized title and program of sociology, had in the fullness of the age of liberalism arrived at as dead a level as liberalism itself. In the case of Comte the inborn mysticism of Saint-Simon's school had definitely overthrown the democratic ideal in favor of a new autocracy of scientific leadership; while Spencer's more jejune, but also still more mechanical, panacea of peaceful industrialism has been accused by Albion W. Small, probably with some justice, of being responsible for the remarkable barrenness of English sociological work during the next generation. It is significant of the interlocking of the social sciences that what there was of a new impetus to sociological theory in England came from the neighboring fields of specialistic social inquiry. Patrick Geddes in Edinburgh took up the "regional and civic survey" type of research propagated in France since the fifties by Frédéric Le Play. Edward A. Westermarck in Finland brought the methods of continental ethnology to bear on the problems of the history of the family and sex relations which had up till then, through the methodical shortcomings of L. H. Morgan's American Indian studies, been chiefly used as props for the dogmatism of the German socialists. Political science, in writers like T. H. Green and L. T. Hobhouse, succeeded in outgrowing, by fruitful discussion with continental learning, the traditional moralism of Paley. And earlier and more powerful than all these, comparative jurisprudence gathered the scientific harvest furnished by the administration of the British Empire in Sir Henry Maine's great and at least theoretically lasting discovery of the primitive village community and of the law of progress from status to contract.

In 1887, in Germany, Ferdinand Tönnies, long familiar with Hobbes' realism of social concepts, enunciated his famous theory on the succession of *Gemeinschaft* and *Gesellschaft* that has swayed German sociology and kept it in touch with international sociological thinking ever since. Just enough of a liberal rationalist to put philosophical and statistical generalization above historical vision, of a social critic to denounce liberal complacency, and of a conservative psychologist to feel the foundations of society in the simple and primitive, Tönnies occupied an unusually advantageous position amid the cross-currents of social controversies at home and abroad. But for the moment it was precisely this balance of mind and height of

philosophical aim that postponed his popularity, if not his influence, until well into the twentieth century, while the official leadership of German sociology passed from the Spencerian liberalism of P. von Lilienfeld and G. Schäffle into the hands of the Austrian racial sociologists L. Gumplowicz and W. Ratzenhofer. Children of the same social and political unrest as the economists of Karl Menger's school, these two men, one a Polish Jew, the other a German officer, greatly and deservedly impressed the world of the social sciences by summing up, as it were, the political situation of the Austro-Hungarian state in the striking, if one-sided, formula of racial or national group interests blindly drawing individuals into economic, social and political stratifications. And in this case also, Austrians were certainly offset by what might be called a Prussian or north German group of sociologists, although here psychological finesse happened to be on the side of the latter, after having been practically discarded by racial sociology. There is perhaps no other proof so convincing of the genuine fertility of the historical school as that it should have brought forth, at least indirectly, the first systematic attempts at execution of its proposal to treat economics as part of sociology. Only then the "historical materialism" of Karl Marx began to be replaced by something both more critical and more inclusive than itself. As a pupil of Adolph Wagner, Franz Oppenheimer laid out the ground plan of his "liberal socialist" system of sociology by which the "political economy" of feudal landlordism took the place of capital as a monopolizer of labor, and so might be overthrown by the "pure economy" of harmonious competition. Starting from the ranks of the Schmoller school, George Simmel rounded out the century with that most decidedly economic, and at the same time most systematically sociological, of all his works, *The Philosophy of Money*. Last but by no means least, Max Weber, severe critic though he was of Schmoller's lack of system and easy governmentalism, clearly showed by his early work in ancient economic history and modern agricultural policy that the germs of his later encyclopaedic range of sociological induction lay in the common stock of the "socialists of the chair."

While thus German and Austrian sociology, despite all conflict, was held together by the economic issues of the "social question," the sociology of France after 1871 had, above all, a political and cultural task. With the relapse of Comte into mysticism before its eyes, a new

generation of sociologists was found to resume the exploration of the rational and democratic possibilities of social progress by means of education that had been the driving force of social thought in France from the time of the *encyclopédistes*. This impulse became the central idea of the two social philosophies of Gabriel Tarde and Emile Durkheim. Tarde, a lonely worker using the scientific foundations laid down by Spencer, produced what is very imperfectly called, after one of his books, the theory of imitation. (All depends on how imitation is set in motion by the original forces of invention, in a multiplicity of systems that remind one of the "vortices" of his countryman Descartes.) Durkheim, on the contrary, rallying the full forces of national learning and instruction in an effort to create a scientific foundation for a new secular education, went directly to mental laws, creating a *fait social* in the mind of primitive societies, in his search for social levers of equal power with those of the great rival of laicism, the Catholic church.

In America, finally, the first energetic steps were being made by sociology "up from amateurism," as Small has justly emphasized. For the particular advantage, as well as difficulty, of America consisted in the broad philanthropic and humanitarian interest which American churches, schools and societies understood to be the true aim of a new science of society. The later spread of university and even school teaching in sociology, comparing so favorably with that in any European country, did not, it is true, begin until the next century. But meanwhile Comte's and Spencer's projects were patronized by scientists and doctors, ministers and judges, and there was one danger, which had been absent in Europe, that the spirit of patient reasoning and inquiry would be crushed under attempts to lay hold of the new study for the exclusive privilege of dilettante theories or reforming activities. In this situation it was the lasting merit of Lester F. Ward that he created for American sociological research a first model by, at the same time, making "social forces" a part of a comprehensive system of dynamic "nature" and yet never forgetting the "social" character that assigned them a role of their own, and in fact the highest of all roles in the dynamic universe. And it is hardly a matter for blame that Ward should have been inclined to transfer the naturalist's belief in the exactness of his results to the new subject on which he too had ventured as an amateur, and thus to establish his system

too dogmatically as the last word on the subject. Younger men learned from him and went beyond him. Against the Comtian concept of sociology as an aggregate of sciences, Franklin H. Giddings took from Spencer the cue for treating it as an underlying method and basic principle of study, although for him too, and once for all, Ward had broken the Spencerian spell of automatic social evolution. So there was ample room for further development, systematic as well as specialized. W. G. Sumner, who held the first chair of sociology at Yale, began the realistic study of classes and groups of population that might so easily have been neglected in a rapidly standardizing society and yet was destined to become one of the most important branches of applied sociology. E. A. Ross, relative and personal pupil of Ward, was started by him on his laborious career as a field researcher and traveling conqueror of ever new realms of sociological understanding. C. H. Cooley threw the first solid bridge over to the restlessly progressing work of American psychology and in doing so made enduring gains, like Simmel in Germany, in the difficult task of conceptional classification and nomenclature in sociology.

So far as the rest of what we now comprise under the wider notion of social sciences, history, jurisprudence and anthropology is concerned, the time had hardly come for even an outright recognition of their social viewpoint and consequent common relationship. Perhaps even some "progress backwards" was made by them from this viewpoint, under the stress of specialization as well as of opposition to former philosophical attitudes. But even these backslidings in the end served to arouse discussion and to give the period a general character of fruitful experimentation.

Thus in history the new national consciousness inevitably resulted in attempts to unite the knowledge of periods and institutions in a consecutive and comprehensive view of national development, the scientific conceptions of evolution and race, here as elsewhere, entering into a somewhat strange alliance with political purpose and emotion. Heinrich von Treitschke provided the bourgeoisie of the new German Empire with a historical outlook which, in its peculiar blend of monarchical and popular, centralist and racial elements, was the exact reflection of the "constitutional monarchy," while to Austria fell the task of basing the study of the Middle Ages on a new perfected "diplomacy" (shaped from documentary sources), as a sort of parallel to the

theoretical technique of the Austrian economists. In Italy Pasquale Villari gave his *Storia politica* to the united nation. In France the standard national history of Ernest Lavisse resolved to a certain extent the historical debate of the parties, while embodying the mediaeval harvests of the Ecole des Chartes. And even in England and America the immense literary and scientific influence of J. R. Green culminated in a liberal apotheosis of the Anglo-Saxon political genius, before the work of John Seeley opened new vistas of imperial magnitude. But despite all this, definite claims were put forward on behalf of a non-political and a "cultural" principle of historical research by W. E. H. Lecky, the Irishman, and on the continent by Karl Lamprecht, who showed perfect willingness to cooperate, in his economic research, with all the other branches of the brilliant philosophical faculty of Leipsic University.

In jurisprudence, too, the stage lights were turned on the German generation that first, after the revolution, dared to incorporate the sum of nineteenth century legal development in a great civil law codification. Otto Gierke, although hardly satisfied with what the new code took up of "Germanist" doctrines, became both an international teacher and a national adviser in the bulky volumes of his *Genossenschaftsrecht*. In a chair at Vienna, on the other hand, Rudolph von Ihering started his brilliant career as a fearlessly modernistic interpreter not only of Roman law, but of the meaning of law generally, in terms of will, purpose and struggle, as opposed to Savigny's view of harmonious organic growth. And it was in an attack upon Ihering's rationalistic analysis of Shylock in *The Merchant of Venice* that Joseph Kohler first showed himself to be a powerful renovator of Hegel's philosophy of law in the modern garb of a universal student of primitive and comparative law. If in this way even the theory of law seemed to end in historical relativity, the science of public law, in the dawn of modern imperialism, was limited by the disposition of its interpreters to rest content with accounting for and comparing factual systems. While Paul Laband and Otto Mayer analyzed the positive contents of constitutional and administrative legislation, the early work of Georg Jellinek began to wander into the historical and comparative field, as did the great schools of R. Dareste and A. Esmein in France.

Last of all, anthropology (a name applied by the classical writers, like Kant, to a quite general, even psychological, knowledge of man)

began to give promise of becoming not only a universal basic social science but also a rival of sociology from the point of view of what purported to be the firmer standing ground of the physiological and biological roots of human existence. An increasing dissatisfaction both with the "objectivity" and the broader human significance of current political history made the effort to write the "history of civilization" or of "mankind"—the old aim of the *encyclopédistes* and later of Buckle—the center of anthropological efforts. Very little of all this has been able to survive on account both of a lack of methodical depth and of an inverse wealth and rapidity of material progress. Medical celebrities, like Rudolf Virchow and Armand de Quatrefages, tried to put to anthropological use the material furnished by the great standing armies of Germany and France, only to quarrel over the latter's rather preposterous theory of a *race prussienne*. More successfully Wilhelm Wundt left medicine to found the first laboratory of experimental psychology in Leipsic, and fully made up for what the philosophers thought his deficiencies in their field by a wonderful and stimulating interest in the whole gamut of social and historical anthropology. In fact he and his Leipsic colleague Friedrich Ratzel, the geographer, became the heads of a rich family tree of German and international schools with all the anthropological and ethnological branches. In contemporary England John Lubbock (later Lord Avebury) concentrated on the problems of the origin of civilization; E. B. Tylor brought back from Mexico the critical and comparative viewpoint that was to inspire the early work of W. B. Spencer and F. J. Gillen on the Australian, and of Franz Boas on the American, aborig-

ines; the Evanses carried the ethnological method into Celtic and Mediterranean archaeology; and J. G. Frazer made a first imposing attempt to take stock of the scattered treasures of folklore. Even comparative philology, which had hitherto given preference to dead languages and written sources, was touched by the impulse of Darwinian evolutionism and tried to join the "natural" sciences, keen on the "physiological laws" of change and relationship, under the influence of Max Müller, August Schleicher and the school of the "young grammarians" in Germany. And curiously enough, racial pride, which furnished the basis of Count Gobineau's protest against English cosmopolitanism at the culmination of the liberal age, drank life instead of death from the rising tide of naturalism and relativism, and in cultural philosophies such as Wagner's and Nietzsche's grew into an inseparable element of the new age of nationalism and imperialism. A striking illustration of this is found in the Russian novelist Dostoevsky, who even in the atmosphere of the Eastern church crowned the life of a revolutionary by fanatic assent to the creed of the pan-Slavists.

A great many short cuts had yet to be proved delusive before all the conflicting elements in the social sciences could be harmonized in John Stuart Mill's conception of political economy as "a branch of social philosophy so interlinked with all the other branches that its conclusions, even in its own peculiar province, are only true conditionally, subject to interference and counteraction from causes not directly within its scope; while to the character of practical guide it has no pretension, apart from other classes of considerations."

CARL BRINKMANN

Europe through converting into applied science the empirical practises then used in the production of metals. In addition to doing his scholarly work he was active in public life in Chemnitz and held many offices there.

THOMAS T. READ

Consult: Hoover, H. C. and L. H., biographical introduction to their translation of *De re metallica* (London 1912); Darmstaedter, E., *Georg Agricola, 1494-1555, Leben und Werk* (Munich 1926), containing an extensive analytical bibliography; Schmid, F. A., *Georg Agrikola's Bermannus* (Freiberg 1806); Jacobi, G. H., *Der Mineralog Georgius Agricola und sein Verhältniss zur Wissenschaft seiner Zeit* (Zwickau 1881); Hofmann, Reinhold, *Dr. Georg Agricola* (Gotha 1905).

AGRICULTURAL COLONIES. *See* LAND SETTLEMENT.

AGRICULTURAL COOPERATION.

GENERAL. Broadly understood, agricultural cooperation represents the application of cooperative principles to the needs of the agricultural population. Agricultural cooperation as thus interpreted has as many subdivisions as there are distinct economic interests which can be promoted by combined action. So interpreted, agricultural cooperation cuts across the usual functional classification of cooperative forms. However, the more useful notion of agricultural cooperation is much narrower; it is limited to those varieties of cooperative effort which serve the needs of the agriculturist as one engaged in the farming business. Generally speaking, the contacts of an agricultural enterprise with the outside world center about the borrowing of capital funds, the purchase of equipment, materials and supplies as well as of services incidental to the basic production process, and the disposition of the product. Ordinarily, therefore, agricultural cooperation comprises rural credit cooperation, cooperative purchasing of farm equipment and supplies, and cooperative processing and marketing of products.

The nature of services rendered and the type of members served give a clue to the distinctive characteristic of agricultural cooperation as a movement. It is the only important branch of cooperation resting upon a large mass of small business units as a base. Only in agriculture has the small scale producer shown ability to survive competition with larger units, and only in agriculture has it been possible to utilize cooperative principles for the promotion of busi-

ness efficiency. The paradox of a cooperative movement with a business membership is more apparent than real. It is just because the farmer realizes his inadequacy as a business man that he seeks the help of a cooperative which will relieve him of many of the important business duties otherwise so difficult and burdensome.

However, the business character of the membership leaves its peculiar impress on the movement. The ties between the members and the organization are not as many sided or as durable as are found in labor cooperation. The much talked of individualism of the farmer, often indistinguishable from the assertive independence of the petty business man, makes it hard to induce him to join a cooperative and to keep him actively interested once he has been enrolled. On the other hand the gross receipts per member, and hence the capitalization, of an agricultural association are far larger than in other forms of cooperation. It is not surprising therefore that general principles of cooperation are modified in several ways when they are applied to agriculture. The "one-man-one-vote" rule is adhered to quite generally, although the voting power is frequently proportioned to the amount of business furnished by each member and in some cases voting by proxy is allowed. Moreover agricultural cooperatives are generally open to new recruits from among the farmers. However, capital is often attracted at the cost of paying market rates of interest on members' shares and of permitting the ownership of more than one share. Also, in order to mitigate the depressing effect of competition on prices, members are not allowed to leave the organization when it is temporarily advantageous, although they may usually leave at stated intervals. It is significant that the instrumentalities employed in effecting these desirable results are not so much an appeal to the solidarity of interests as the tangible weapon of greater returns. Enforceable contracts are of real, although incidental, help in holding members together.

The real mission of agricultural cooperation is not to bring about a fundamental reconstruction of the business regime but rather to save the farmer from the disabilities entailed by the small size of his business and his lack of training in the ways of a commercial civilization. To accomplish this it must not merely supply all the needed services at reasonable prices but must also attempt to "rationalize" the production side of its members' business. Within lim-

its the farmer must be taught what and how much to produce, what is the best equipment to use and what occasions warrant the borrowing of fresh capital. In this as in its other activities agricultural cooperation may expect assistance from the state, because it attempts not to displace but merely to perfect the existing economic order. The comparative generosity of state aid is another feature which sets it apart from other forms of cooperation.

Conditions for the development of modern cooperation in agriculture were being prepared when the commercialization of economic life began to impinge upon the small agricultural producer. As business has grown and increasingly larger units have developed during the nineteenth century, the situation has become continually more precarious for the small, peasantlike proprietors who, with unbusinesslike methods, have waged an unequal struggle against the towns. The towns first of all absorbed the industries which had been closely associated with farming. Next they developed business men and sales organizations which as bargainers were more than a match for the small farmers. This meant that the farmers were hopelessly at a disadvantage in the struggle to hold their own. In certain countries, notably England, a larger and more aggressive type of farmer got control of the land and was able for a time to meet the business world on its own grounds. On the continent, especially in such countries as Switzerland, Austria, Germany, France and Italy, the struggle of the small farmer was a real one, often a tragedy. It was in these countries that cooperation among farmers first flourished.

So far as is known, the first instance of modern agricultural cooperation occurred in Switzerland, beginning in 1815. This was a cheese making enterprise at Kiesen, and consisted merely of a group of dairymen banded together on the basis of turning the milk into cheese, each man being left with his cheese to dispose of as best he could. This plan was subsequently adapted to all manner of undertakings connected with the processing of agricultural products for the market. Another less common form of this type of quasi-productive cooperation is the cooperative ownership of implements and machines. There are many instances of this among the small farmers on the continent, but very few in England and the United States, a disparity which is partly due to the relatively large size of the English and

American farm. Because of the individualism of the farmer, cooperative ownership of machines is restricted to small farms, for which it seems an essential condition of survival. For the same reason there are only rare cases of collective cultivation of the soil. With the exception of a few instances in Italy and Russia, which are the result of peculiar circumstances, one would search in vain for genuine examples of cooperative farming.

Neither from the manufacture of raw products into a commodity demanded by the market nor from the ownership of equipment was the principle of cooperation carried over into the field of agricultural production proper. Instead the principle was applied with considerable success at the opposite end of the farming business, the point at which the farmer comes into contact with the market, in the sale of his products and in the purchase of his supplies. In the first of these, at least, cooperation has succeeded so well that it surpasses in importance the earlier form from which it sprang—the processing of farm commodities for consumption. Indeed processing at present is undertaken only in combination with marketing.

Cooperative marketing serves a well defined need. Even before the days of high pressure salesmanship, the farmer could not be as efficient in disposing of his produce as those who were engaged in selling as a special business. He is not fully conversant with market opportunities, nor is he always cognizant of the precise shape and form in which his produce may be wanted. Even if he is in possession of all the relevant information, it may be uneconomical for him, because of the relatively small sales of any specific item, to bring his product to the best market or to put it in the form wanted. To take butter as an example: the best of cream may be produced on almost any good dairy farm, but to turn this cream into butter requires hundreds of dollars' worth of equipment, unless primitive and expensive hand methods are used. To market the butter from an individual farm is either not feasible at all, or at best expensive. The farmer is therefore forced to leave a large part of his marketing to an agent, either a merchant or a cooperative company of which he is a member.

In its marketing phase, perhaps more than in any other, agricultural cooperation differs from what is ordinarily understood by cooperation. As an organization a marketing association adopts the form of a business concern

with a variety of security issues arranged so as to preserve the equitable distribution of control between members and to allow for considerable borrowing of funds from the outside. Its dealings with members are not unlike those of a commission house which makes a settlement with its customers on the basis of price received for the produce less the commission charge for handling it. The important differences are, first, the limitation of its services to members, although even this is not always the case, and second, the way in which the cost of handling is computed. While the charges of the commission house bear no apparent relation to the expenses incurred by the house, those of a non-profit making cooperative must obviously be based on cost. The way in which expenses incurred are transmuted into deductions from gross receipts varies according as each member's produce is handled independently or is pooled with that of other members. The method of settlement with members is also affected by the length of time for which the produce is pooled, that is, whether it is intended for immediate sale or is to be manipulated by the cooperative for the length of perhaps an entire season in the hope of selling it at the best possible price. The "manipulation pool" gains in importance with the development of "commodity marketing," which attempts to control a sufficiently large stock of a single commodity to insure a real influence in the market. Obviously an organization of this type differs also from an ordinary commission house in that it must control the disposition of produce by its members; it cannot allow them to sell to other concerns if it is to build up and preserve its position in the market.

A local marketing association can do a great deal for the farmers by pooling their produce, establishing agencies in more distant markets, helping to put the commodity in a marketable form and finally by increasing through combination the bargaining power of its members. The efficiency with which these services are rendered is in direct relation to the size of the organization. The greater the number of individual farmers combined, the less is the expense of handling the produce and the more impressive is the influence exerted by the organization in the market. The advantages of size can be achieved in several ways: small local associations may federate and set up a directing center to which certain important functions may be delegated; or an association may attempt

expansion more directly by increasing its membership and having local branches for immediate contacts; or it may enter into contractual arrangements with other associations for a limited length of time. The method by which an organization overcomes the difficulties involved in the dispersion of its membership depends upon the importance of services which must be performed locally; upon the homogeneity of its potential membership; and finally upon the stage of development which cooperation has reached when an increase in size appears urgent. If strong local associations have grown spontaneously and have been at least moderately successful, if the raising of a particular commodity is in the hands of both large and small producers, if no particular savings can be effected by doing grading, packing and storing on a larger scale than is possible for a local association, then the federation or contract devices are the more practicable methods to adopt. Otherwise a centralized organization is preferable.

Among the best examples of farmers' selling organizations of Europe are the Danish butter and bacon companies. The great share of Danish butter is made in cooperative factories, under state inspection and control so far as quality and grades are concerned. For many years Danish butter has been rated at the top in quality. Its main market is England, to which it is sent through several export federations with agents in England. These butter companies have long been recognized as models of efficiency. Of similar character are the well-known "bacon factories" of Denmark. One of the most significant features of the Danish cooperative bacon companies is their control over production. They do not directly limit the amount of swine which may be delivered, but they do prescribe, within narrow limits, the type and quality. Since the authorities at cooperative headquarters now and then change the margins among grades so as to make it more profitable to send hogs to market at one weight rather than another, they are also in a position to increase or diminish the supply of hogs at the time according as lighter or heavier weight is preferred. Thus the quantity of bacon made during a given season can be appreciably controlled or at least greatly influenced.

While in Denmark and several other countries, such as Ireland and the Netherlands, the marketing associations are the outstanding type of cooperative effort, other European countries

excel in cooperative purchase of supplies wanted by the farmers. Europe as a whole is far in advance of America in cooperative purchasing. Here again it is the small size of the farm which furnishes an essential condition for cooperation. Much as the small farmer is interested in cooperative selling, he is still more concerned with cooperative purchasing. He is often near a good market for sale, such as an open air city market, but finds himself at a hopeless disadvantage in dealing with people from whom he must make purchases. Not only is machinery to be bought, but from year to year it is necessary to buy commercial fertilizers. In these latter purchases there has always been until recently a great chance for fraud, and where fraud was absent there was at least an opportunity for the dealer to take a high margin of profit. The cooperative company has an advantage over many private dealers in being able to buy in large quantities and for an assured market. Again, the cooperative market can render a great service in the matter of credit, first, by encouraging cash payments, and second, by providing credit at cost where it is really needed. On the continent, especially in Germany, cooperative buying is closely associated with credit cooperation of the rural type.

UNITED STATES AND CANADA. In America conditions are quite different from those in Europe. The farms are in the main larger; the farmers are more independent in economic matters and as cooperators they are harder to deal with. Successful cooperation is mainly of the sales type, although in the sections of the country where markets for selling are good, and where agriculture is of such a character as to require heavier purchases of goods needed in the round of production, the buying side is proportionately more in evidence.

Cooperation began in the United States much as in Europe, as a means by which certain small farmers could manufacture dairy products into forms which could be marketed. The first known instance of this was the cooperative making of cheese in the state of Wisconsin in 1841. Cooperation in the manufacture of cheese and butter has grown to great proportions; at first progress was slow, but since 1890 it has been persistent and widespread. Other lines of cooperation began, largely during the seventies, inspired by the Grange.

The occasion of the rapid growth of the Grange was clearly that of a surplus of agri-

cultural produce; the trouble was not merely a weak demand in the ultimate markets but also a serious disorganization in the channels from producers to the market. Lack of grading, involving ignorance on the part of producers of what they were offering for sale; high and unregulated freight rates; middlemen who were able to make wide margins; a wholesale trade so far removed from the farmer and his comprehension of big business as to lead to all manner of suspicions; retailers unregulated by law, without the restraining competition of mail order houses or chain stores—all these combined to produce a multiplicity of both real and imagined grievances among farm people. They were easily induced to form cooperative companies, some of which succeeded, more of which were ill-starred.

While there were sporadic instances of cooperation in the manufacture of cheese and butter before the days of the Grange, and likewise a few efforts at cooperative grain selling, there were but a small number of such undertakings, and these not very important or stable. The Grange was instrumental in launching cooperation in butter and cheese manufacturing, taking these operations, often permanently, out of the home. At the same time grain and livestock shipping companies, or rather groups, were organized. The majority of the cooperative companies were not incorporated, while the rest were incorporated under the general corporation laws. When reverses came, as they were bound to come, the so-called cooperatives either went out of existence or became ordinary business units owned and managed for profit. By this means numerous farmers became business men, left their farms and moved into the villages. In spite of the fact that the Grange was instrumental in starting hundreds of cooperative undertakings, only a few were still in existence by 1880, four years after the beginning of the decline of the Grange. The remaining units were mainly organizations for the purchase of farm and household supplies, and these were located not in the heart of the farming district but in the eastern states.

The Farmers Alliance ran a very similar course in relation to cooperation, organizing and inspiring the organization of a number of companies. The story of their successes and failures is almost the same as that of the Grange period. The majority of the undertakings were in the Southwest and Middle West. They suffered both from the lack of a proper legal

foundation and the lack of intelligent leadership. The alliance itself came virtually to an end in the early nineties. The cooperatives it founded struggled on, with here and there an instance of survival which suggested permanence. This period covers the years from about 1880 to 1892.

In 1902 two farmer movements came to the front: the Farmers Educational and Cooperative Union and the American Society of Equity. Both undertook, more exclusively than had their predecessors, to solve the marketing problem. Both organized local cooperatives, including consumers' societies and selling companies. The Equity and its successor, the Equity Union, went even farther than the local undertakings and established several centralizer creameries, some of which are making over three million pounds of butter per year. Each of these organizations has established local livestock shipping associations, combined later into central livestock exchanges. Central grain exchanges have been attempted. The Farmers Union has established several big and apparently successful exchanges for handling supplies for farmers and their families. It cannot be said that either the union or the Equity has solved the problem of cooperation, yet they have both promoted very important cooperative companies.

The American Farm Bureau Federation, which came into existence in 1919, gave promise of sweeping the cooperative field. Unfortunately its most prominent effort, designed to revolutionize the marketing of grain, came to an untimely and inglorious end. The dairy marketing plans have not been put into practice and are not being pushed. The influence of the Farm Bureau has been important in connection with many marketing undertakings, yet it has not been a revolutionizing force within the field.

Real success in cooperative marketing of agricultural products has been achieved only for a comparatively few commodities, and has been due to those immediately concerned in the operations rather than to outside inspiration. That is not to say that cooperation is of no importance in the sale of some portion of all leading agricultural products. There are cooperatives, local and central, in the marketing of grain; of livestock; of dairy products, including milk, butter and cheese; of fruits and vegetables; of poultry and eggs; of cotton; of tobacco. Approximately 11,000 cooperative marketing companies are doing business at the

present time in the United States; their aggregate membership, including some overlapping, is about 2,000,000. The amount of business done has in some years reached \$2,500,000,000, or not far from a quarter of the annual sales of farm produce. In general these companies are bringing greater returns to the farm than could otherwise be obtained.

The cooperative marketing of fruit offers some of the most conspicuous examples of success. The California Fruit Growers' Exchange stands out as a model in many important particulars. Some forty years ago the citrus growers of southern California found themselves growing fruit for which there did not appear to be a sufficient demand. The prices offered were so low as to result in severe losses to the growers; often the prices would not cover the cost of picking and boxing fruit after it was ripe. As a result of the feeling that local private shipping companies were getting too much for the services rendered, attempts to organize cooperatives were made as early as 1891 and 1892. In 1895 the Southern California Fruit Exchange was organized. This company had many ups and downs, but was able to overcome difficulties sufficiently to keep going. In 1905 the name was changed to California Fruit Growers' Exchange. This organization, with the bulk of the citrus product under its control, has won a respectable place for itself in the business world. Its cost of doing business is remarkably low; its command of the market is as near to perfection as is often reached by any organization not having a monopoly; its return, therefore, to the individual member is such as to commend itself to the great majority of growers.

The company is composed of local associations of growers, twenty-two district exchanges and the central exchange. The locals own and operate packing houses and equipment for handling the fruit. The district exchanges are composed of locals, each local electing one representative to the district board. In turn the central exchange is composed of the districts united through a board, each district furnishing one representative. Sales are made by district managers acting under the advice of the central exchange sales department. Pooling is done through the locals, over lengths of time varying from a month to the full season, as they may agree upon.

The California Fruit Growers' Exchange does the largest business of any single cooperative company of the United States. Its sales in

1927 reached \$85,000,000. Sales are made through agents, usually by auction, in all cities of considerable size. Not infrequently this organization is accused of exercising monopoly control over the orange and lemon trade. This is true only in a very restricted sense. To begin with, it exercises no control over the planting of orchards. Even the supply coming to the market it can regulate only indirectly. The secret of its success lies in the fact that the exchange is in a position to take advantage of market conditions in a way which is open only to big, efficient organizations. It has at hand, almost hourly, complete information in regard to its market, with the aid of which it is able to direct fruit to the places where it is most wanted and away from points where there is a threatened oversupply. Moreover the supply sent is varied on the basis of probable returns, the growers being advised to pick and ship for table use an amount not in excess of a given quantity, the balance to be sent to by-product plants for the manufacture of citrate of lime, lemon oil and the like. As a rule these plants handle only the inferior fruit; however, when prices are low, a correspondingly higher grade will be used in this manner.

The California Fruit Growers' Exchange, together with another much smaller cooperative citrus company of California, markets over 80 percent of the citrus fruit of the state. A large part of the Florida citrus fruit is likewise cooperatively marketed.

The producers of milk, butter and cheese have had real occasion to look for better markets and to demand better marketing facilities and treatment than the commercial companies have afforded.

The dairymen furnishing milk for all the larger cities of the United States are organized into bargaining companies through which agreements with city milk distributors are made. As cities have grown and have had their milk supplied by increasingly larger areas, it has become evident that the individual dairyman was helpless as a bargainer against the highly organized city distributors. The early efforts at organizing the fluid milk dairymen were not very successful. In recent years, however, some forty associations, several of which deal with the distributors of more than one city, have reached a degree of development which promises to be permanent. These associations vary in membership from a few hundred to over fifty thousand. So far the prices are made by

the bargaining parties on the basis of what the market will apparently stand without cutting off the demand or over-stimulating the supply. The prices paid by the distributors of milk have been much higher in relation to butter-fat values since the organization of the cooperative than was formerly the case.

Cheese making is much more localized than the production of butter. This accounts for the earlier efforts on the part of cheese producers to establish a cooperative marketing system. There are two main cooperative companies: the National Cheese Producers' Federation, with headquarters in Wisconsin, and the Tillamook County (Oregon) Creamery Association. These associations undertake to grade and sell the product of the cheese factories which belong to the federations. They are handling about one tenth of the cheese of the country.

Since butter is made in almost every county of the country, the butter producers are a widely scattered group. For many years it was evident that the butter market was in need of reorganization. Apparently the private dealers had made all the progress they were capable of; still they left much to be desired. In 1921 a cooperative association of large proportions and with an ambitious program was launched in Minnesota. This organization, known as the "Land o' Lakes Creameries, Inc.," was not the first attempt of its kind, but at present it is the outstanding instance of the cooperative marketing of butter. Since a large percentage of the creamery butter of the country is made within a few hundred miles of St. Paul, it was logical that this city should become the center of cooperation in the selling of butter. The company comprises between four and five hundred cooperative creameries, over a third of the whole number of such creameries of the three states of Minnesota, Iowa and Wisconsin. It has accomplished remarkable things in the matter of changing the quality of butter, increasing the proportion of the high grades and also increasing the demand for it. Its sales are now approaching the hundred million pound mark, and its receipts are distinctly above the returns available through other channels. The returns are better because the butter is more economically handled, going through fewer hands and being shipped to its destination by more direct routes.

Cooperative grain marketing got under way after the unsuccessful attempts made in the first years of the twentieth century. Over four

thousand elevators were cooperatively owned. These elevators have done well in reducing the local costs of handling grain. They have never been able to federate effectively for handling grain on the central markets or for export. Several states have highly centralized wheat pools, but for the most part their successes have been nominal. In 1929 the Farmers National Grain Corporation was organized to provide a national marketing agency for these pools and local elevators. It has the support of the government and its main purpose is to arrange for the orderly export of grain to relieve the depression in the American market. The organization is still in its incipient stages, so that little of significance can be said of it at present.

In Canada wheat pools have reached great size and have attained a high degree of perfection. They are conducted on the federated plan. In recent years they have handled over half of the wheat, and some of the other grain, sold by the farmers of the western provinces. They conduct an export business, maintaining agencies in the leading foreign markets. These pools, three in number, acting jointly through a central sales agency, do the largest business of any cooperative on the continent; their gross receipts are about twice as large as those of the California Fruit Growers' Exchange.

So far we have dealt with cooperative marketing and with but a few instances of cooperation in the processing of agricultural produce. In America other applications of cooperation to agriculture are few and thus far have not attained great importance. However, we may briefly mention the more important undertakings.

Of these the more specifically agricultural types of cooperation are found in irrigation and insurance. About six and a half million acres, or slightly less than a third of the land under irrigation, are watered by cooperative companies. Irrigation is a process which lends itself quite well to this type of management. In insurance the conspicuous examples of rural cooperation are the numerous farmers' mutual fire insurance companies. In some states, notably Pennsylvania and Iowa, they are statewide in their operations and carry a large share of the risks of this sort. In Michigan the "Gleaners" carry life insurance and fire insurance and also act in a limited manner as a credit society.

The American countryside has had and continues to have many examples of consumers'

cooperation among the farmers, but they are neither successful nor important. Again and again cooperative stores have been started, and while the number of new ones is usually considerable, the whole number hardly increases from year to year. The casualties among them are high, especially in periods of falling prices such as that following the World War. While cooperative stores are successful in Europe, it seems impossible for them to gain a foothold in America, at least while conditions remain the same as at present. Two institutions militate against the cooperative store: the mail order house with its attractive prices and good service, and the chain store with its narrow margins on which the retail work is done.

In concluding we may note some recent developments which point to the disappearance of some of the old problems and the emergence of new tendencies in agricultural cooperation. The early efforts sponsored by the Grange were defeated partly because of the lack of a legal foundation for the work of cooperatives. This has been remedied by state and federal legislation, mostly since 1900. Acts were passed providing for the incorporation of cooperative companies, giving them security and advantages which they could not enjoy under the general corporation laws. The new legislation and court decisions permit organization along Rochdale lines (limitation of shares and distribution of dividends according to patronage), the creation of non-stock associations with net returns settlements, and make the contracts between a marketing association and its members enforceable against the latter by allowing the collection of "liquidated damages" and the use of injunction and specific performance proceedings. Laws have also been passed providing immunity to cooperative companies from antitrust laws in cases where technically the marketing companies appeared to make themselves liable to prosecution.

Related to changes in law is the emergence of governmental support to agricultural cooperation. Nearly all states have departments of markets which almost without exception have facilitated the work of farmer cooperatives. Experiment stations have made a series of studies which have served to furnish information concerning the successes and difficulties attendant upon the workings of cooperative undertakings. The Bureau of Agricultural Economics of the federal Department of Agriculture has a division of cooperation, the purpose of which is

to study and promote the interests of cooperation among farmers. Through the War Finance Corporation and the Intermediate Credit Act the federal government has put money at the disposal of cooperative companies. Finally the new Federal Farm Board has been active in stimulating the organization of national agencies of cooperatives which could undertake a regulated export of agricultural products. The recently organized National Chamber of Agricultural Cooperatives, a combination of marketing cooperatives, is to exert pressure upon the government and public opinion of the country as well as to promote a further increase in membership of these cooperatives.

The recent trends in cooperation are clearly toward larger units. It has been demonstrated again and again that cooperative companies, like other organizations for doing business, cannot hope for success while running on the basis of small output. The cooperative creameries, for example, which were started forty years ago, were designed to accommodate the farmers dependent upon a load hauled over poor roads by horses. Now with good roads and gasoline trucks the sphere of activity may well be four times as extensive. The larger cooperatives of all sorts show the lowest unit costs.

Again, and this is even more significant, cooperative companies in the past have viewed the market as a great stronghold to be attacked and conquered. Now it is evident that any successful attack must be accompanied by organized action respecting the use to be made of the conquered forces. In the early years of cooperation it was taken for granted that the market could absorb all possible production at a remunerative price, if only the predatory characteristics of those guarding access to the market could be subdued. Now it is understood that marketing means taking care that the demand for goods be not demoralized by oversupply. This is the greatest lesson, and one of the hardest for the farmer to learn. In this phase of the subject little progress has been made, but the outlook is hopeful.

BENJAMIN HORACE HIBBARD

See: COOPERATION; CREDIT COOPERATION; CONSUMERS' COOPERATION; AGRARIAN SYNDICALISM; AGRARIAN MOVEMENTS; FARMERS' ORGANIZATIONS; RURAL SOCIETY; AGRICULTURE, GOVERNMENT SERVICES FOR; AGRICULTURAL POLICY; GRANGE; FARMERS ALLIANCE; FARMERS UNION; FARM BUREAU FEDERATION, AMERICAN; MARKETING; AGRICULTURAL MARKETING; AGRICULTURAL INSURANCE; IRRIGATION; FOOD SUPPLY; FRUIT INDUSTRY; DAIRY INDUSTRY; FOOD

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AGRICULTURE, GOVERNMENT SERVICES FOR. As early as 367 B.C. the Roman Republic recognized the importance of agriculture and the rural population by adopting a measure limiting the size of private estates acquired from the public lands. Numerous other laws relating to agriculture followed, practically all of them dealing only with land ownership. European legislation in the Middle Ages and the Renaissance was concerned chiefly with permitting enclosures of common land and with prohibiting increased wages for farm labor.

It was not until the eighteenth century that the agricultural revolution in Flanders, later moving to England, and the notable decline in the population of France, caused serious governmental consideration of effective scientific and economic aid to agriculture. The first steps were informal and tentative, such as the importation of a few pure bred cattle and the extension of some measure of state aid to agricultural societies.

In the following century government services for agriculture developed chiefly along two important lines: first, the formation of organizations for research and education; second, the extension of special credit privileges to farmers, the development of reclamation projects, the protection of agricultural labor, and the development of regulatory activities as to foods, feed stuffs and the like.

Practically all nations of agricultural importance now have government departments of agriculture, primarily for research and the dissemination of its results. Most of these departments were founded in the nineteenth century, either separately or as divisions of other departments. In some countries the experiment stations are under direct control of the Department of Agriculture. In practically all countries, however, most of the stations are governmental institutions, as are the colleges of agriculture and the agricultural secondary schools. Notable experimental work has been done under governmental auspices in Great Britain, Germany, France and, particularly as to soils, in Russia. In practically all European countries excellent college and university courses in agriculture are offered, these institutions being almost invariably state supported. Secondary education in agriculture has been developed

to probably the highest degree in Denmark.

Governmental services to agriculture have been developed most extensively in the United States, except as regards certain advanced forms of social legislation affecting agriculture. In colonial days subsidies and bounties were offered by both the British and colonial governments to stimulate various lines of agricultural production. The raising of silkworms especially intrigued the fancy of the politicians, and financial encouragement was extended to this industry in Virginia, Georgia and South Carolina. Hops, indigo, hemp, lumber, pitch, tar and sheep were also subjects of governmental assistance. The aid extended consisted variously of premiums, land grants, instruction, the repeal of duties, and the payment of bounties on the products when shipped to England.

Subsequently, when the United States attained its independence, its most influential citizens expressed special interest in agriculture. Either they had had personal experience in farming, as had George Washington and Thomas Jefferson, or they recognized its importance in the development of the young nation. Their thinking was influenced by knowledge of what Arthur Young and other proponents of the agricultural revolution had done in England (Young corresponded extensively with Washington), and by the agricultural theories of the French physiocrats, which are plainly evident in Jefferson's eulogies of the farmer. In his last message to Congress in 1796 President Washington advocated government support for agricultural institutions in these words:

"It will not be doubted that, with reference to either individual or national welfare, agriculture is of primary importance. In proportion as nations advance in population and other circumstances of maturity this truth becomes more apparent, and renders the cultivation of soil more and more an object of public patronage. Institutions for promoting it grow up supported by the public purse, and to what object can it be dedicated with greater propriety? Among the means which have been employed to this end, none have been attended with greater success than the establishment of boards composed of proper characters, charged with collecting and diffusing information, and enabled, by premiums and small pecuniary aids, to encourage and assist a spirit of discovery and improvement. This species of establishment contributes doubly to the increase

of improvements by stimulating to enterprise and experiment, and by drawing to a common center the results, everywhere, of individual skill and observation, and spreading them thence over the whole nation. Experience accordingly has shown that they are very cheap instruments of immense national benefits."

The proposal was lost in Congress, however. The early governmental support given to agriculture was not federal, but state. State aid was extended by Massachusetts to the Society for Promoting Agriculture as early as 1792. New Hampshire extended aid to county societies in 1817. Similar aid was extended by various other states. The money received by these societies was employed largely in publishing articles on agriculture, and in giving premiums either for exhibits of crops and livestock or for new discoveries in agricultural practise.

Aid was first extended by the United States government in 1839, when Congress appropriated \$1000 for collection of agricultural statistics for agricultural investigations, and for the procurement of cuttings and seeds for free distribution among the farmers. The work was placed in charge of the Patent Office because Henry L. Ellsworth, then commissioner of patents, had already begun volunteer distribution of seeds and plants from abroad and had shown special interest in governmental aid for agriculture. Appropriations continued to be made to the Patent Office for agricultural purposes for more than twenty years, the high mark being reached in 1855, with \$50,000. In 1862 agriculture was placed in a separate department with a commissioner at its head. In 1889 the commissioner of agriculture became secretary of agriculture with a place in the president's cabinet.

The Department of Agriculture has shown steady development, being now by far the largest organization in the world devoted to agricultural research and the dissemination of agricultural information. The total number of employees is approximately 22,000, and the annual expenditures are more than \$150,000,000, two thirds of which is for road construction, subsidies to states for research and extension work, and conservation purposes.

The other work of the Department of Agriculture includes the following types of activity:

(1) Research, such as experiments in animal and plant breeding, investigations in pure

science underlying agriculture, horticulture, forestry and similar subjects; experiments in methods of controlling animal and plant diseases and pests; in soils; in the economic problems of agriculture, such as farm management, individual and cooperative marketing, and the discovery of new uses for farm products. The actual practises of farmers on farms and in cooperative and other organizations are studied. Extensive statistical data are gathered.

(2) Extension work, the dissemination of facts discovered through research, carried on in the Office of Extension, in the Office of Information and in individual bureaus. Each year the Department distributes approximately 30,000,000 copies of its publications. It presents authentic agricultural information through more than 100 radio stations. It exhibits educational motion pictures before many gatherings of farmers. It supplies agricultural copy to newspapers and agricultural journals. It prepares numerous exhibits for large fairs. Largely in cooperation with the states, it carries on extension work through county agricultural agents, home demonstration agents and boys' and girls' club agents. Demonstration has proved especially effective.

(3) Eradication or control of plant and animal diseases and pests through organized campaigns, independently or in cooperation with state agencies. It is interesting to note that since the passage of the Plant Quarantine Act in 1912 only one major agricultural pest, the pink bollworm, is known to have become established in the United States.

(4) Service work, such as administration of the national forests, the weather service, crop and livestock estimating, the market news service, and inspection service on farm products at shipping points and terminal markets.

(5) Regulatory duties, comprising administration of approximately forty laws, including the Food and Drugs Act, the Meat Inspection Law, Plant and Animal Quarantine Acts, the Migratory Bird Treaty Act, the Cotton Futures and Cotton Standards Acts, the Grain Standards Act, the Warehouse Act and the Packers and Stockyards Act.

The Department of Agriculture is headed by the Secretary of Agriculture and the Assistant Secretary. There are five directors, covering respectively the fields of scientific work, regulatory work, extension, information, and personnel and business administration. Legal matters are handled by a solicitor and his staff. Bureaus and offices, organized on the basis of

subject matter, comprise experiment stations, weather, animal industry, plant industry, forestry, chemistry and soils, entomology, biological survey, public roads, agricultural economics, home economics, plant quarantine and control, and foods, drugs and insecticides. The last two offices are organized for the enforcement of laws, while the others are engaged mainly in research. The library, containing 205,000 volumes, is the largest agricultural library in the world. Its facilities are employed by scientists outside, as well as within, the Department of Agriculture.

In the same year that the Department of Agriculture was established Congress also passed the Land Grant Education Act, which offered public lands to each state for the establishment of colleges of agriculture and mechanical arts. Such colleges now exist in every state in the union, and in Alaska, Hawaii and Porto Rico. In some cases the Land Grant college is a separate institution, while in other instances it is connected with the state university. A number of southern states have separate Land Grant colleges for Negroes. State experiment stations were subsidized by an act of Congress in 1889, and most of the existing state stations owe their founding to this act, although several had been established earlier. Later legislation (1925) has furnished still more extensive federal funds to these stations, giving them special opportunity to develop investigations in agricultural economics and in home economics. The federal government itself maintains stations in Alaska, Guam, Hawaii, Porto Rico and the Virgin Islands. Extension activities, aside from the publishing of agricultural information, began with lectures before farmers, which gradually developed into farmers' institutes. The institutes began in the sixties and reached their maximum influence between 1900 and 1915. In 1914, 8861 institutes were held, with an aggregate attendance of 3,050,150. Most of the institutes lasted one or two days, a few extending over three or more days. From 1916 on, the institutes declined. Their place has been taken largely by the system of county agricultural agents and county home demonstration agents, involving actual demonstrations under local farm and home conditions. During the same period boys' and girls' clubs have developed extensively, their members undertaking practical farm and home projects and also endeavoring to interest their communities in higher standards of agriculture and rural life.

All of the modern extension activities are increasing group thought and action as a habit in country neighborhood life, and are stimulating individual ambitions for more satisfying homes and communities. The federal government gives aid to high schools offering instruction in agriculture and home economics.

Large sums are expended by the states for agricultural education, research and extension. Certain of the federal appropriations are conditional upon equal expenditures by the states. Many states also pay the expenses of boards or departments of agriculture engaged chiefly in gathering and supplying information of use to agriculture, although other government services are also furnished. For example, seeds and plants, either imported or developed in the United States, are at times distributed by the United States Department of Agriculture or by state agricultural colleges to farmers qualified to make use of them in practical field tests. For many years a vast quantity of seeds was distributed by the Department of Agriculture through members of Congress, but this practise came to be recognized as undesirable and was abolished June 30, 1923. Rural free delivery of mail, which has brought the farmer into close touch with the thought of the nation generally, was begun in 1896. It now reaches approximately 24,282,000 people. The good roads movement, on which vast sums have been expended by national and state governments, has also been a potent means of communication for farmers. The weather service was recognized as especially useful to agriculture as early as 1890, when Congress transferred it from the army to the Department of Agriculture. Its forecasts have been of incalculable value to agriculture, especially since they have been disseminated by radio.

Extensive projects have been undertaken for land reclamation. Swamp lands have been reclaimed only under state laws, inasmuch as the federal government by legislation in 1849, 1850 and 1860 granted all the federal swamp lands to the states in which they were situated. Practically all of the drainage enterprises under state laws consist of corporate districts or county drains, the cost in both cases being met by assessment against the land benefited. Projects for reclamation of dry land by irrigation have been undertaken under both state and federal auspices. State aid has generally been undertaken in much the same way as in the case of swamp lands—through irrigation district

laws, making the lands liable for the cost of their own reclamation. The first state or territorial law for irrigation was passed by Utah in 1865. In 1894 Congress passed the Carey Act providing for patenting large areas of desert lands to several states on condition that the land be reclaimed by irrigation and sold to actual settlers. Eight years later the federal government actually entered into reclamation projects. The work has been administered by the Department of the Interior. Early projects proved largely disappointing because of failure to consider the actual needs of settlers aside from the provision of sufficient water. Beginning in 1923 more adequate methods have been undertaken with the purpose of determining, before construction is authorized, the feasibility of a project and its dependability for actual settlement of farm homes. While in some cases reclamation projects have proved successful, in others they have resulted in dissatisfaction to the settlers and in losses to the federal government. In view of the overproduction of various cash crops in the United States in recent years, there is a strong feeling against the reclamation of further land for the present.

Closely related to land reclamation is the California land settlement plan, the only example of its kind in the United States. Under this plan the state buys land, provides irrigation and drainage works so far as necessary, subdivides the land into farms, farm laborers' allotments and town lots, and sells the land on easy payments to actual settlers. Two colonies have been established under the law, but the time since their establishment has been too short to predict the extent of their ultimate success. Similar projects have been proposed for adoption by the federal government.

All these government projects possess the advantage of being backed by the public treasury and consequently of being able to carry settlers through periods of depression such as are almost universally characteristic of agriculture, and for the elimination of which no government has yet found adequate means. They possess such disadvantages as may be associated with contemporary political control.

Cooperative marketing, doubtless the most important project on the business side of agriculture in this century, has received both federal and state aid. This has consisted in the furnishing of information and in the passage of legislation enabling these organizations to

function effectively. Delaware is the only state having no law governing cooperative associations. The Capper-Volstead Act, passed by Congress in 1922, places upon the secretary of agriculture responsibility, upon the one hand, for protecting the public against unwarranted use of power by cooperatives and, on the other hand, for protecting the associations from unwarranted prosecution. The federal government has also established a division of cooperative marketing in the Department of Agriculture for the purpose not only of studying effective practices in cooperation but also of supplying useful information as to market conditions to the cooperative organizations. Until very recently the United States, in contrast to some European countries, has not extended financial aid to cooperatives. However, through the Federal Farm Board established by the Agricultural Marketing Act of 1929, the federal government intends to encourage the organization of cooperatives and to aid in financing their operations in the hope of promoting orderly marketing of agricultural products.

Considerable service has been rendered to farmers by means of extension of credit. The Federal Reserve Act of 1913 permits five-year loans on land to farmers to the extent of 25 percent of the capital and surplus of the bank. This is only an incidental feature of the law, however. Much more extensive facilities are offered by the Federal Farm Loan Act passed in 1916, following a study of European practices. The establishment of the Federal Reserve System added a certain flexibility in the handling of short term agricultural paper. The Agricultural Credits Act of 1923 set up federal intermediate credit banks which may loan directly to cooperative associations, may rediscount for other banks, and in turn may rediscount with the Federal Reserve Banks. It also set up agricultural credit corporations to deal in agricultural, including livestock, paper.

Long term credit to farmers is also provided by a number of states. Minnesota, Oregon, North Dakota and South Dakota have special systems for the purpose of supplying farm credit. The most elaborate system is provided by the Bank of North Dakota. Arizona, Colorado, Idaho, Maine, Montana, North Dakota, Oklahoma, Oregon, Utah and Wyoming offer a small amount of rural credit through the administration of the school land or other public land funds. Some states also have legislation providing for credit unions or cooperative credit associations.

Various special services to farmers have been offered by certain states. North Dakota, through the efforts of the Nonpartisan League, offers the most conspicuous example. In 1919 the state established, in addition to the Bank of North Dakota, a mill and terminal elevator, a home building association, and hail, fire and tornado insurance. The home building association proved unsuccessful and disbanded. The other agencies still exist; after weathering the agricultural depression, they have achieved a fair measure of success, in spite of the prevalence of opposition to the Nonpartisan League. Several other states maintain insurance departments which carry certain risks, most important of which, from the specific standpoint of the farmer, is hail insurance. For the most part, however, hail insurance, like fire insurance, is in the hands of joint-stock or mutual companies.

On the whole, government assistance to agriculture in the United States has been limited to the provision of information and advice. This is manifestly due to the high degree of individualism among American farmers, which in turn is attributable, in considerable measure, to the great territorial area, and the fact that farmers, for the most part, live on their separated farms and not in villages, as in certain European countries.

In many other countries conditions are quite different. For example, in Austria, between 1890 and 1900 cooperative organizations were provided with an elaborate system of subsidies for the export of agricultural products, the employment of specialists, the construction of necessary buildings, and the purchase of machinery. In time, however, this aroused a certain opposition, and some cooperatives were formed with the policy of accepting no government aid. In Belgium, the *comices agricoles*, the technical agricultural societies, are semi-official. In a number of countries agricultural insurance receives special state support. France subsidizes cooperative livestock and some other forms of insurance. The province of Alberta in Canada operates hail insurance on the basis of a tax. Special credit facilities are offered to farmers, especially through cooperative associations, by practically all European countries, while agricultural credit is also available in countries in South and Central America, Africa, Asia and Australasia.

Agricultural labor is protected in many countries. For example, Ecuador, Esthonia and

Spain regulate the hours of labor directly, while in Austria, Czechoslovakia, England, Germany and Poland the hours of labor are fixed by agreement or regulation legally enforceable. In the United States, in which the number of farm laborers is only about half the number of farms, regulation of hours of agricultural labor has always been successfully opposed by owning and tenant farmers.

There are state employment services in many countries. In the United States, however, the service provides largely seasonal labor. Italy is the only country which has compulsory unemployment insurance for agricultural workers. In Denmark and in the Netherlands there is voluntary unemployment insurance under state supervision.

Special aid to agriculture has been given by various governments through land settlement plans. The Australian system is of special significance in that it provides for either individual or colony form of settlement, for the grouping of lands to provide town sites, farm laborers' allotments and regular farm areas, for the organized construction of agricultural improvements, for the selection of settlers on the basis of their fitness, for long-term credit, for the prevention of speculation so far as possible, for the establishment of demonstration farms for advice and instruction, and for cooperative community organization. Denmark supplies state funds to rural and urban laborers of small means for the purchase of small holdings, the purpose being to support the small holdings system, which has been successful in that country for more than a century. Finland has a state land settlement fund for loans to communal societies for settlement on the land. These societies in turn supply credit to the various land settlement undertakings. There is also a state land fund for cooperative societies to supply floating capital to small landowners. In England the colony form of settlement has been put into effect under the Board of Agriculture and Fisheries, the state guaranteeing against financial loss. Each colony is managed by a director, the settler being employed at the current rate of wages, but receiving also a share of the profit from the farming operations. In New Zealand loans have been made by the state to settlers on land since 1894. In Italy the state gives aid to the purchase of land by cooperative societies for agricultural purposes. Various dues and taxes are remitted, and credit up to 80 percent of the value of the land is extended.

Practically all civilized countries have adopted systems for the diffusion of agricultural information. For a long time the colleges and universities were the only source of instruction, and they reached only persons of exceptional ability, training or opportunities. Chiefly since 1900 the movement to reach working farmers and their families with practical information has gained impetus in practically all countries, while greater and greater emphasis has been laid on the study of agriculture in the rural schools and, in some agricultural countries and regions, in city schools also.

The kind of service given to farmers in this field differs in various countries. For example, the several states of Australia maintain more than fifty experimental farms, in addition to approximately twenty times this number of experimental plots on private farms. Thus the double purpose of experimentation and demonstration is served. In addition each state lays great emphasis on personal visits by the experts of its department of agriculture to individual farms. Lectures and demonstrations are given under the auspices of the agricultural bureaus, which are local organizations of farmers for the promotion of agriculture. The Dominion of Canada maintains some twenty-five experimental farms and stations, in addition to demonstration farms and plots operated by the provincial departments of agriculture. It has also a system of agricultural representatives comparable to county agricultural agents in the United States, but responsible wholly to the respective provincial governments. The Farm Women's Institute, which has spread throughout the world since 1899, is a Canadian contribution, as are also rural school fairs. In Chile every elementary school maintains a class in agriculture and a field for agricultural experiment. The teachers are trained by annual courses offered by professors in the Higher Institute of Agriculture. The government gives special short courses in the various branches of agriculture, and also sends special demonstration trains throughout the country to promote better methods of cultivation. Denmark has made one of its chief contributions to agricultural services for farmers in an indirect way through the establishment of the people's high schools. It is due not only to the instruction but also to the spirit developed in these institutions that agricultural cooperation has proved so successful in that country. Denmark also has an elaborate system of lectures by experts paid

wholly or in part by the government for the assistance of practical farmers. There are special schools for small allotment holders, as well as other agricultural institutions. Agricultural education in Denmark dates from 1845. In France each department has a director of agricultural services, assisted by one or more professors of agriculture. Instruction farms, schools of agriculture, schools of home economics and women's institutes are likewise maintained. A system of chambers of agriculture is also provided for by law. In Great Britain research has been carried on very effectively. Most of the counties employ a paid official called an agricultural organizer, who advises farmers and arranges lectures. Belgium employs about thirty agricultural experts, the same number of deputies and a smaller number of horticultural advisers. These men reach the farmers by lecture, demonstration and personal visits. In particular the government requires them to instruct farmers in the advantages of organization. In Germany agricultural experiment and instruction are heavily subsidized by state governments, and much work of high quality has been done. The chambers of agriculture, which are not government bodies, have done much in local agricultural organization and instruction. In Spain there is a law permitting demonstration fields to be maintained cooperatively by villages and district farm schools, the villages furnishing the land, and the schools the technical direction, machines, seed and fertilizer. Comparatively few villages, however, have adopted the plan. The schools are required by law to give short farm courses. Experimental and demonstration work, similar to that maintained in European and American countries, is carried on in China, although on a smaller scale. In Japan there are more than fifty agricultural experiment stations, short courses are offered in both agriculture and home economics, and the lectures are frequently illustrated by lantern slides or motion pictures. Agricultural courses are regularly given in the army to soldiers from rural districts. The government has also distributed large quantities of improved seeds and plants.

The technical agricultural services offered by the government of Soviet Russia are of special interest as representing the point of view of a political system very different from the systems of other nations. The government offers much material assistance to small farmers who will unite into agricultural coop-

eratives, while it prohibits any effort to coerce the peasants into cooperation. The purpose is a great socialized agricultural industry. In addition the government has organized the *Sovkhoz*y, or grain producing enterprises. These are large, highly mechanized farms, following largely the practises that are used in modern wheat ranches in the United States. On January 1, 1928, 2,722,000 hectares (approximately 7,100,000 acres) were embraced in the system, each *Sovkhoz* having an average size of 500 hectares. In 1928 the government began a program of more than doubling the extent of the *Sovkhoz*y, wherever possible, by adding new farms. By 1933 the government expects to have replaced all primitive Russian plows with modern mold-board plows, of which it is estimated that 7,000,000 will be needed. In the same period it is planned to put 100,000 tractors into the farming industry.

The government has adopted a ten-year colonization plan to settle more than four million people on fertile border lands. Irrigation and other reclamation projects are provided for. Considerable emphasis is laid not only on improving agriculture but on strengthening the border regions economically and politically.

The experimental, educational and extension work in Russia is similar to that in other European countries. In 1927 there were seventy-one agricultural experiment stations and several other laboratories supported by the government.

The International Institute of Agriculture (see AGRICULTURE, INTERNATIONAL INSTITUTE OF), founded in 1908 through the efforts of David Lubin, is the most potent means for international collaboration and cooperation in technical matters connected with agriculture. The League of Nations, through its Economic Consultative Committee, deals with some agricultural problems. Its relation to technical services rendered by governments to agriculture has not as yet, however, become well defined.

NELSON ANTRIM CRAWFORD

See: AGRICULTURE; AGRICULTURAL POLICY; AGRICULTURAL MARKETING; AGRICULTURAL CREDIT; AGRICULTURAL INSURANCE; AGRICULTURAL COOPERATION; AGRICULTURAL LABOR; AGRICULTURAL SOCIETIES; AGRICULTURAL EXPERIMENT STATIONS; COUNTY AGENT; CROP REPORTING; FOOD AND DRUG REGULATION; RECLAMATION; IRRIGATION; LAND SETTLEMENT; SMALL HOLDINGS; ALLOTMENTS; FARM LOAN SYSTEM, FEDERAL; AGRICULTURAL EDUCATION.

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AGRICULTURE, INTERNATIONAL INSTITUTE OF. Around 1900 David Lubin, a California merchant, became convinced that agriculture urgently needed an international clearing house for timely information on the extent and condition of crops, and the number and kinds of livestock. He argued that the wise adjustment of agriculture in any country depended upon an accurate knowledge of the industry in other countries. In addition he held that crop areas and conditions were important price making forces which should be a matter of public knowledge. Lubin attempted to interest various governments in the promotion of such an organization. These efforts brought him in touch with the king of Italy, who was impressed with the logic of this enthusiastic American and commended the plan to the favorable consideration of his government. As a result the Italian government sponsored an international diplomatic conference which culminated in the formulation of a treaty signed on June 7, 1905, by the representatives of forty nations. This treaty created the International Institute of Agriculture, with its center of operations in Rome.

The institute is an official organization, supported by governments. Voting powers are regulated in accordance with the financial obligation voluntarily undertaken by each nation. Colonies and dependencies are admitted on the same conditions as are independent nations. The legislative body is the General Assembly, which meets, as a rule, once every two years. Executive responsibility rests

expression, practising what she preached in the matter of economic independence and applying her equalitarian philosophy to the emancipation of a race as well as a sex. Although she did not live to see ratified the federal amendment granting woman suffrage, she had agitated for it incessantly for fifty-five years. She had poured a steady stream of articles into the press, pleaded from platforms across the continent, drafted resolutions, circulated petitions, raised funds for publications and assistants, met the requirements of a difficult and voluminous correspondence, argued before state legislative committees and the Congress at Washington, struggled with a weekly paper, helped in editing the documents of the movement, and from 1892 to 1900 she carried the responsibilities of president of a national organization of women. In all her work, however, her emphasis was on the vote as an instrument, not a goal.

MARY R. BEARD

Consult: The History of Woman Suffrage, ed. by E. C. Stanton, S. B. Anthony, M. J. Gage and I. H. Harper, 4 vols. (New York 1881-1902); Townsend, H. A., *Reminiscences of Famous Women* (Buffalo 1916); Howe, M. A. de W., *Causes and Their Champions* (Boston 1926); Eddy, G. S., and Page, K., *Makers of Freedom: Biographical Sketches in Social Progress* (New York 1926); Dorr, R. C., *Susan B. Anthony* (New York 1928).

ANTHROPOGEOGRAPHY. *See* HUMAN GEOGRAPHY.

ANTHROPOLOGY.

INTRODUCTORY. Anthropology deals with man as a social being. The races, languages and cultures found in different localities and following one another in the course of time are the material and contain the problems of anthropological study. The historical events that have led to modern conditions and the sources of the differentiated forms of social life, whether sprung from a common source or of multiple origin; the processes by which modifications of race, language and culture come about by the action of inner forces and by mutual influences; the interrelations between man and his environment and those between race, language and culture; the types of mental activity found in distinct cultures; the relations between individual and society—these present some of the problems that anthropology is trying to solve.

Its subject matter includes all the phenomena of the social life of man without limitation of time and space. From an anthropological viewpoint human life of the earliest times and of the

remotest parts of the world is no less important than that of historic times and of our own race. The geographical distribution of forms of human life and their historic sequence from earliest time to the present must be included in the scope of anthropological researches. The first task of the science is therefore the reconstruction of the history and distribution of mankind and of the forms of human life.

This material must be supplemented by the investigation of the physiological reactions of the body determined by heredity and environment; of the mental processes of the individual under the stresses of natural and social environment; and of the behavior of society. The analysis of static types, languages and cultures alone is insufficient for an understanding of their development. The dynamic conditions of change require a knowledge of the sequence of events and of the functioning of society and of its component individuals.

The life forms of any given people exhibit three distinct phenomena: bodily form, language and culture. Culture itself is not a unit, for the manifestations of social life are diverse in character. Bodily form is determined by biological conditions, by the influences of heredity, environment and selection. Language is largely dependent upon linguistic processes. Although these are intimately related to other cultural phenomena they are so unique in their character that the linguistic processes may be considered separately. Culture in the narrow sense of the term is highly complex, for the conditions under which economic life, inventions, social forms, art and religion develop are not analogous, although in many respects interrelated.

A reconstruction of the history of mankind must take into account all these aspects, for each one throws light upon a definite series of happenings. Since the conditions under which change takes place in bodily form, language and culture are quite distinct, it must not be expected that the same series of events will be reflected in each. Observation shows that these groups of phenomena possess only slight coherence. In modern times the bodily appearance, speech and culture of the American Negro show a continuance of racial type combined with complete change of language and culture. Earlier occurrences of the same type are illustrated by the substitution of Latin for Iberian in Spain and of Arab for Berber in North Africa. Sometimes languages persist notwithstanding changes in type due to the intermingling of races, as

among the Athapascan Indians who live in isolated localities on the Mackenzie River, in California and on the Mexican border. Their languages are closely related, their types quite distinct. The differences of culture in Africa, combined with similarities of types and close relationship of languages, also illustrate the independence of cultural development from physical form and language.

On account of the disparity of these elements classifications of mankind based on bodily form, language and culture give contradictory results. Each group of phenomena must be looked at independently as reflecting one aspect of the history of mankind.

Two methods for the reconstruction of human history during those times in which no written records exist are available: prehistoric archaeology and the comparative study of similar phenomena in regard to form and distribution. Prehistoric archaeology can give us information only on the occurrence of such tangible objects as skeletal remains, objects of stone, pottery, bone; in favorable cases more perishable materials may be preserved. Fragments of intangible aspects of culture may sometimes be inferred from the forms of artifacts; but language, beliefs and customs are, on the whole, inaccessible to archaeological research. The possibilities of comparative study may be illustrated by the results of linguistic study, which has succeeded in establishing a considerable part of the linguistic history of the Indo-European family of languages.

The attempt to reconstruct the history of mankind is beset with one fundamental difficulty. Similarity of bodily form and culture is not always due to common origin but parallel forms may develop independently in distinct units. Independent parallelisms are found in life forms. The desert plants of Africa and America have a similar *habitus* and similar modifications of organs, although they are not genetically related. The marsupials of Australia have developed on lines similar to higher mammals, although they represent a distinct genetic line. Immediate physiological responses due to insufficient nutrition or to particular kinds of exercise are analogous in all races of man. In language similar categories, like a classification of concepts according to sex or form, or similar processes, like duplication of words or of parts of words for grammatical purposes, are found in a number of isolated regions. Similarities of inventions, customs and beliefs may also have

sprung up independently here and there. In language the number of words and grammatical forms, all of which are so many independent elements, is so large that in most cases historic relation can be definitely established by the existence of numerous independent analogous forms. It is frequently true that the question of the independent origin or historical connection of isolated cultural phenomena cannot be answered categorically. The occurrence of parallel phenomena in biological forms and in language does not countenance the assumption of the non-existence of independent origin of cultural achievements. For this reason we demand in a reconstruction of historic development that a proof of historical connection of cultural forms in distinct areas should be based on the occurrence of complex and unrelated phenomena and upon the distribution of the phenomena over continuous areas; also that the assumption of lost intermediate links should be used with greatest caution.

Consult: Ratzel, Friedrich, *Anthropogeographie*, 2 vols. (3rd ed. Stuttgart 1909-12), and *Völkerkunde*, 3 vols. (Leipzig 1885-88), tr. by A. J. Butler as *History of Mankind*, 3 vols. (London 1896-98), for the importance in historical reconstruction of a study of distribution over continuous geographical areas; this principle has been rigidly applied in the study of North American ethnology by Leslie Spier, "The Sun Dance of the Plains Indians" in American Museum of Natural History, *Anthropological Papers*, vol. xvi (1921) 451-527, and "Havasupai Ethnography" in American Museum of Natural History, *Anthropological Papers*, vol. xxix (1928) 81-392; Boas, F., "Tsimshian Mythology" in Bureau of American Ethnology, *31st Annual Report, 1909-10* (Washington 1916) p. 29-1037; Kroeber, A. L., "Handbook of the Indians of California" in Smithsonian Institution, Bureau of American Ethnology, *Bulletin 78* (Washington 1925). Fritz Graebner, *Methode der Ethnologie* (Heidelberg 1911) takes the viewpoint that independent origin is impossible and assumes that a few correspondences in remote areas are proof of historic connection; on this basis he establishes *Kulturkreise* based on similarities which he assumes to be retained since remote antiquity. This theory has been adapted and expanded by W. Schmidt and W. Koppers, "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912-24) vol. iii, pt. i. Quite unacceptable are the views of G. Elliot Smith and his followers, who would derive all phases of human culture from Egypt (see, for instance, Perry, W. J., *The Children of the Sun*, London 1923). The other extreme is represented by Daniel Brinton who would not admit any borrowing. On the whole the earlier anthropologists, like Adolf Bastian, did not take a definite position on this question. Bastian was rather indifferent to the problem of historical transmission or independent development, because he laid stress upon the psychological conditions that bring into

being certain ideas everywhere; no matter whether the impetus may come from inside or outside, the same ideas will always develop. Edward B. Tylor, although primarily interested in the problem of the general line of evolution of culture, recognized the importance of the problem of independent origin versus historic transmission.

BIOLOGICAL ASPECTS. Man is closely related to the anthropoid apes, and the home of man must be looked for in an area in which early anthropoid forms occur. These are absent in America, present in southern Europe, Asia and Africa. The origin of man must, therefore, be looked for in the Old World. The oldest human remains belong to the early quaternary and are represented by a lower jaw found near Heidelberg. The form of the jaw is so distinct from later and recent forms that it has been described as a separate species, "*Homo Heidelbergensis*." In the middle quaternary another primitive type is found, "*Homo Neandertalensis*," remains of which occur in western Europe. It was probably not the ancestor of modern races, but a side branch. Towards the later quaternary, forms appear which are related to modern man. It is even possible that at this time the differentiation of the Negro race and of the Mongoloid races had occurred. The absolute time elapsed since the end of the quaternary is estimated at about ten thousand years. There is much difference of opinion in regard to the time when the Neandertal man lived, but it can hardly be less than fifty thousand years ago. Crude implements made of stone are much older. Neandertal man also possessed fire, and there are evidences, at the end of the period in which he lived, of fireplaces and burials. All this has a bearing upon race development, because the use of utensils and of fire characterizes the mode of life of man as that of a domesticated being, enjoying artificial protection and artificially modified feeding. The body of modern man shows clear evidence of the effect of domestication, for the hair form of the Negro, the loss of body hair, the length of hair on head and face, the blondness and general loss of pigment, the blackness of the Negro, the lack of periodicity of sexual function, the permanence of the female breast, the reduction in size of the face, are analogous to features that develop in domesticated animals. The history of human races must be considered from the point of view of the origin of races of domesticated animals. On the basis of morphological evidence it seems that two, perhaps three, fundamental races must be distinguished: the Negro,

which is found in Africa and in isolated places in southern Asia and the islands north and east of Australia, in general around the Indian Ocean; the Mongoloid in Asia and America; and as a third ancient type the Australoid and a similar type in southern India. The European would seem to be an early offshoot of the Mongoloid, while the Negro may be an offshoot of the Australoid.

At the present time a large number of local types exist, the history of which is difficult to trace. There must have been many centers in which during an early period of isolation distinct types developed, but this period has been followed by intermingling of distinct types, so that at the present time no sharp lines can be drawn between the varieties of man.

The individuals composing any local variety exhibit considerable differences among themselves. The brothers and sisters composing a single family—a fraternity—also show considerable differences among themselves. Each fraternity represents on the average a certain hereditary type, and when these types are compared they also exhibit a considerable variety of forms. When comparing neighboring groups, similar groups of fraternities are found in all. For this reason it is impossible to define a local race in such a way that the description would fit all members. All that can be done is to determine the frequency distribution of the various component types.

On account of these conditions it has been found necessary to give for each type exact measurements in place of general verbal descriptions. The selection of features that are commonly measured is determined partly by striking differences in form, as in the relations between transversal width and antero-posterior length of the head, partly by the ease with which exact measurements can be taken. Not enough attention has been paid to the morphological significance of the measurements selected. This would require a detailed inquiry into their permanence under varying conditions. The object of the metrical description is essentially a statement of the distribution of hereditary types and of their modifications by the environment.

It is not permissible to assume that individuals of the same bodily form, but members of distinct local groups, are genetically identical, for the series of their offspring will always revert toward the population to which they belong. If these are distinct, the offspring of each will develop on different lines. Too little is known of

the ancient development of types under conditions of isolation, of the effect of intermingling, and of the variability of types, to allow us to lay great weight upon the attempts to reconstruct the history of development of present types and to determine their ancient habitats.

The development of specialized types may be investigated in isolated, inbred communities. The high nobility of Europe and small, stable village communities offer such opportunities. It has been shown that under these conditions peculiar hereditary features appear with unusual frequency in the community. Up to the present time attention has been directed particularly to the occurrence of pathological traits, but observations on small tribes indicate that many normal traits may increase in frequency in the same way. The frequency of divisions of the occipital bone among the American Pueblo Indians, the hairiness of the Ainu, the excessively round heads in some of the valleys of the Alps must probably be explained in this manner. Minor differences of local types may perhaps all be due to the effects of early segregation of small groups, the characteristics of which were transmitted by heredity. In this case the range of variation of local types would be limited by the range of variation of the ancestral group. New features can develop only by mutations.

The question how far environment may bring about variation in type has hardly been investigated, because most metrically determined forms are assumed to be dependent on heredity alone. It is recognized that stature, an expression of bulk of the body, is strongly influenced by both heredity and environment, that the improvement of economic and hygienic conditions raises the average stature of a population through a direct influence upon the conditions of growth. Headform and facial width are also not absolutely permanent, but it is not known to what extent changes under varying conditions may develop. Their occurrence is analogous to skeletal changes that are observed in animals born in captivity which differ in details from the bodily forms of the parents.

Differentiation of local types may develop also by selection. If a relation exists between bodily form, on the one hand, and birth rate, mortality and tendency to migration, on the other, changes in the distribution of individuals will occur that are reflected in the impression given by the population as a whole, although physiologically determined changes in the individual may be entirely absent. It has been

suggested that a population containing many blonds exposed to a climate with intense sunlight would become darker by greater mortality of the blonds. Correlation between pathological processes and bodily forms is therefore of importance for an understanding of the development of local types. Much of our knowledge of this subject is vitiated by the difficulty of differentiating between social and organic conditions that determine the selective processes. In modern populations the different social strata do not represent identical types. This is due to the varying mobility of populations and local differences in social and economic status of the component parts. Since birth rate, mortality and migration are dependent upon social status, the distribution of bodily forms must undergo changes. It is doubtful how strong this influence may be in populations that are socially homogeneous. At the present time the identity and distribution of each local human type can be determined, but it is not possible to account satisfactorily for the processes of differentiation.

Wherever distinct types are in close geographical contact, and whenever archaeological research indicates a sudden change of type in a specific region, it is possible to trace by means of the study of types the migration of peoples. Thus the sudden appearance of round-headed types in prehistoric England is an indication of migration; the similarity of certain groups of Japanese to Malay forms proves the existence of racial relations; the contrast between the East Indian aborigines and the dominant people who resemble west Asiatics proves immigration of the latter from the west; the distribution of types in Italy proves the intermingling of the type of the Alps with the Mediterranean type.

A number of authors classify races according to certain combinations of metric and descriptive features, for instance, as tall, long-headed, narrow-faced, blond, and recognize another race as soon as any of the selected elements changes beyond a certain arbitrarily determined limit. Types thus isolated have no biological significance because it can be shown that almost all of them are unstable variants of one ancestral strain.

Consult: On early races: Keith, A., *The Antiquity of Man*, 2 vols. (2nd ed. London 1925); MacCurdy, G. G., *Human Origins*, 2 vols. (New York 1924); Boule, M., *Les hommes fossiles* (2nd ed. Paris 1923), tr. by J. E. and J. Ritchie (Edinburgh 1923); Osborn, H. F., *Men of the Old Stone Age* (3rd ed. New York 1918); Macalister, R. A. S., *A Textbook of European Archaeology* (Cambridge, Eng. 1921); Burkitt, M. C., *Prehistory* (2nd ed. Cambridge, Eng. 1925);

Baver, J., *Der Mensch im Eiszeitalter* (Leipsic 1927); Reche, O., "Homo" in *Reallexikon der Vorgeschichte*, vol. v (Berlin 1926) p. 361-80. On heredity, environment and selection: Bauer, E., Fischer, E., and Lenz, F., *Grundriss der menschlichen Erblichkeitslehre und Rassenhygiene*, 2 vols. (2nd ed. Munich 1923; vol. i, 3rd ed. 1927). On phenomena of domestication: Fischer, Eugen, *Rasse und Rassenentstehung beim Menschen* (Berlin 1927). On anthropometry: Martin, Rudolph, *Lehrbuch der Anthropologie*, ed. by Stefanie Oppenheim, 3 vols. (2nd ed. Jena 1928); Hrdlička, Aleš, *Anthropometry* (Philadelphia 1920); Wilder, H. H., *A Laboratory Manual of Anthropometry* (Philadelphia 1920). On classification: Topinard, P., *Éléments d'anthropologie générale* (Paris 1885); Deniker, J., *Les races et les peuples de la terre* (2nd ed. Paris 1926), tr. from the 1st ed. as *The Races of Man* (London 1900); Dixon, R. B., *The Racial History of Man* (New York 1923).

PSYCHOLOGICAL ASPECTS. The relations between bodily form and mental function are of particular importance for the student of human society, for if mental life is partly so determined, differences between the social life of various races may have to be explained on this basis. Much stress has been laid on this point. There is no doubt that individually the members of each local type differ among themselves no less in functional characteristics, both physiological and psychological, than in bodily build. Among different local groups, however, the same phenomenon is present that occurs in bodily build: analogous types are found in different local races. Furthermore function is much more subject to environmental influence than anatomical form. The same organism may be functionally adapted to a wide range of environmental conditions. For this reason organically different individuals are apt to react in similar ways when subjected to the same environment, while organically similar individuals will react differently when living in different types of environment. It is not correct to say that structure is entirely irrelevant in the determination of functional life, as extreme behaviorists claim; for we have ample evidence to show that organs, including the central nervous system, do not function in the same manner in all individuals.

These considerations are, however, irrelevant for the study of languages and cultural forms. The language spoken by a person, and his behavior, are not determined by anatomical forms and the functions depending upon them, but depend upon the social medium in which he lives. Identical twins, one of whom has grown up in Europe, the other in a culture analogous to that of Australian aborigines, will speak the

languages and be guided in their lives by the customary behavior of their environment. Differences in organically determined functioning may influence their position in this environment, but not the character of their behavior. Individual organic differences are immaterial for an understanding of types of culture.

Consult: Thurnwald, R., "Psychologie des primitiven Menschen" in *Handbuch der vergleichenden Psychologie*, ed. by G. Kafka, 3 vols. (Munich 1922) vol. i, pt. ii; Myers, C. S., and McDougall, W., "Physiology and Psychology" in *Cambridge Anthropological Expedition to Torres Strait, Reports*, 6 vols. (Cambridge, Eng. 1901-12) vol. ii.

LANGUAGE. While in most cases the study of bodily form results in rather vague impressions relating to the descent of populations, the study of languages often gives us more precise data in regard to historical events so far as they are reflected in language. On account of the independence of the numerous stems composing the vocabulary of a language the occurrence of the same stems in several languages is an incontestable proof of their historical relation. The stems undergo, in course of time, changes in form and in meaning. Definite directions of change in form prevail at certain times and in certain regions. These can be studied by a comparison of vocabularies, and it is possible to reconstruct older forms with a fair degree of certainty. By following out these changes in form and meaning of stems and of grammatical structure, the history of languages may be partially reconstructed. If related languages are found in extended areas we obtain proof of a historical connection and of a gradual differentiation, as in the cases of the Bantu Negroes who occupy a large portion of Africa and speak related languages, and of the Indo-Europeans who ranged before the period of modern colonial expansion from Spain and Ireland to India and Central Asia. When scattered remains of a language are found in a wide territory, as the Finnish on the Baltic, in Hungary and in isolated groups in Russia, significant inferences in regard to linguistic history may be drawn.

The importance of linguistics for anthropology is generally underrated. The categories of speech are the categories of thought, and the form of language directs the attention of the speaker in definite lines. Grammar embraces a set of categories that *must* be expressed by the speaker. In English I may say, "the man is sick"; in other words, "the definite single man at the present time is sick." The thought cannot be ex-

pressed without stating that we want to speak of a definite or indefinite man, of one or several, of past or present. Other languages select other aspects prescribed by their grammar. We may find the vaguest term, "man sick," or determinations quite different from ours that, however, must be expressed, such as "man (or men) near you visible evidently sick." A generalized translation from English into such a language is impossible. Language does not express the whole of a sense experience, but selects certain parts in regard to which the imagination of the hearer is restricted, while in regard to all others it remains free. The mental pictures produced by the statement of the same expression in different languages are not comparable in their details. In this way the flow of ideas depends upon the language spoken, for our thoughts may be directed in one way by a language that classifies objects according to sex, in other ways by those that classify according to social position or form, or by those that have no classification whatever. Our thoughts may be influenced by what is considered as an object, what as attribute; by what is regarded as a state and what as an action. In all these respects fundamental differences occur.

Similar observations may be made in regard to the vocabularies of different languages. The principles of the classification of experience differ considerably. Many American languages lay great stress upon form. To throw a long or a round or a flat object are distinct concepts. Actions relating to single or multiple objects may be differentiated. On the other hand, specific terms like our "to swim," "to fly," "to walk" may be expressed by a single stem, modified by qualifying elements. The combination of experience in categories follows the most diverse lines.

The influence of language upon cultural life must not be exaggerated, however, for a new cultural need is met by the development of new linguistic forms. The absence of abstract nouns, when it occurs, does not hinder the development of abstract ideas. If the need for them is felt by new experiences, language follows by giving a value to new, formerly unidiomatic expressions. The vocabulary of philosophy is largely of this character. Phenomena of nature that vary in form, each of which has a special significance in the life of a people, are differentiated in language. Thus the Eskimo differentiates between falling snow, drifting snow, snow on the ground, a snow drift and soft snow. We use only one term. The peasant

differentiates between horses according to age, sex and coat color; the Siberian native has numerous terms for his reindeer, the African for his cattle. Those not interested in horses, reindeer or cattle use only a very few terms.

Not all similar linguistic phenomena are due to historic connection. The fundamental traits of all languages show that their forms are a necessary result of the way in which we acquire experience. If every single experience were expressed by a single sound complex, i.e. a word, speaking and understanding would be impossible. It is necessary that the sounds should be recognized. This is possible only if the sounds are not too many and are fixed, and if the whole mass of experience is classified, so that similar experiences are grouped together and recognized by the symbol of the same sound complex. The classification of experience brings it about that the specific designation of an experience must be expressed by its subsumption under a number of classes which must be brought into relation. This means that words, i.e. classes, and grammar, i.e. devices of expressing relations, must be and are common to all languages.

Notwithstanding important differences, the sounds of most languages have in common the fact that they are produced by breathing out, or by the expulsion of air compressed in the oral cavity. Only the tribes of South Africa produce sound by sucking air into the oral cavity in which a partial vacuum is produced. Specific processes by means of which stems are grammatically modified are few: the addition of syllables as affixes (as in "un-kind-ly-ness"); changes of stem (as in "write, wrote"; "teeth, teethe") and significant position (as: "the wolf killed the man; the man killed the wolf") are universally distributed. Mechanical changes of sounds resultant from contact or other close association (as "impossible" for "in-possible") are frequent and of varied character. Sometimes historic changes of sound follow the same rules in widely separated areas. Thus the *k* in Bantu has changed in many dialects to *ch* (as in "church"). The same change occurs in a number of American languages. The effect of the loss of accent of a syllable has also often the same effect in regard to its phonetic development. Thus linguistic data give a safe proof of the independent origin of similar phenomena in remote parts of the world.

Consult: Meillet, A., and Cohen, Marcel, *Les langues du monde* (Paris 1924); Vendreys, J., *La langue*

(Paris 1921), tr. by P. Radin (London 1925); Wundt, W., *Völkerpsychologie*, 5 vols. (Leipsic 1900-09) vols. i-ii; Boas, F., Introduction to "Handbook of American Indian Languages" in Smithsonian Institution, Bureau of American Ethnology, *Bulletin* 40, 2 vols. (Washington 1911-22); Sapir, Edward, *Language* (New York 1921); Jespersen, O., *Language* (London 1922).

CULTURE. Culture embraces all the manifestations of social habits of a community, the reactions of the individual as affected by the habits of the group in which he lives, and the products of human activities as determined by these habits. On account of the heterogeneity of the habits of life it is customary to describe culture from a number of distinct viewpoints: the adjustment of man to surrounding nature; the mutual relations of individual members of a society; and the subjective behavior of man. The adjustment to nature includes the use of natural products for the purpose of nutrition and of obtaining shelter, as well as for less immediate purposes. The relations between individuals include sexual life and the forms of social conduct; the subjective behavior is manifested in art, religion, ethics and science. These various aspects of cultural life are interrelated and their complete separation in a systematic description gives a warped impression of the character of culture. Nevertheless a full description cannot be given without taking up each aspect of culture separately.

The definition of culture given here indicates that so far as the relations of members of a species to nature and to other members of the same species are concerned, phenomena analogous to those of human culture occur in animal society as well. As a matter of fact many of the characteristic human adjustments are found in the animal world. Insects, birds and mammals preserve food for unfavorable seasons; they build shelters, sometimes of very complex construction; they store up provisions; ants cultivate fungi; apes use sticks and stones as tools; they may even break off a stick to be used for a specific purpose. The social relations of animals are varied. There are hermits who meet the opposite sex only at the time of pairing; there are large societies like swarms of fish that welcome any number of their own species and may even admit members of other species; there are other more rigidly organized societies with recognized leaders; and among insects we find the organized states of bees and ants with an elaborate division of labor. Property rights are asserted by individuals and by animal societies.

It is even doubtful whether the culturally determined, purely subjective behavior is entirely absent among animals. The habits of the bower-bird suggest a pleasure in form. Apes seem to enjoy ornaments and rhythmic movements. Domesticated animals distinguish forbidden acts from those permitted. There is no absolute gap between many of the aspects of human culture and the life habits of animals.

In the relations of man to nature the procuring of food and shelter are fundamental. With the spread of man over all climates, ever new adjustments to the food supply and protection against the rigors of climate become necessary.

Consult: Wheeler, W. M., *Social Life among the Insects* (New York 1923); Yerkes, R. M., *The Mental Life of Monkeys and Apes* (Cambridge, Mass. 1916); Alverdes, F., *Tierssoziologie* (Leipsic 1925), tr. by K. C. Creasy as *Social Life in the Animal World* (London 1927).

Food. Archaeological evidence proves that during the palaeolithic age, up to the end of the glacial period, man lived as a food-gatherer, that is, by hunting, fishing and gathering edible parts of plants, shellfish and other stationary or slow moving animals. These conditions still prevail among a few tribes, such as the Eskimo, the Indians of California and the western plateaus, the tribes of Tierra del Fuego, most of the Australians, the Bushmen and some other Pygmy tribes of Africa, the Veddah of Ceylon and the Andaman Islanders. Where the food supply is distributed irregularly through the seasons, the art of preserving food is indispensable. The Eskimo preserves little, partly because the supply of sea mammals is fairly regular, partly because the climate makes preservation difficult. The Australians lay by enough to allow large assemblies to live for weeks on stored provisions. Permanent association of man with plants and animals, that is, cultivation of plants and domestication of animals, does not begin until the neolithic period. It seems probable that the dog is the oldest domesticated animal. Its domestication is now universal, except in a few of the islands of the South Pacific. Domestication probably developed through a form of symbiosis, the dog following human camps and living in part on the refuse of human food. It is significant that all the most important domesticated animals are gregarious: cattle, sheep, goats, reindeer, buffalo, horses, ducks, chickens and geese. It is therefore probable that the relationship of man to gregarious animals was one of the conditions that led to domestication. It has been suggested that the

hunter who follows the same herd establishes a certain property right over it, and that he protects it against the attacks of wild animals; that in this manner gradually a permanent relation between man and the animal was established that led to domestication. If this is true, domesticated animals would have served first of all as a food supply. Their use for other purposes would be a much later development. The present distribution of the use of milk suggests that this discovery is also a late acquisition.

Many of the cultivated plants occur also in great masses. This is particularly true of the grains. Wheat and barley appear in Europe as the first cultivated plants. The property relation of man to an area in which such grains abound may still be observed among the Indians of the Great Lakes who gather wild rice; or among the seed-gathering Indians of the western plateaus. From the more or less permanent relation of man to an area bearing an abundance of the food-producing plant the art of cultivation may have developed. On Vancouver Island we may observe that spots producing roots of cinquefoil are cleared of stones and marked as property by being surrounded by walls of the pebbles that have been thrown away; along the north Pacific coast tribal property is established by burning over woods in order to produce a larger supply of berry-bearing bushes. The relation of man to fruit-bearing trees seems different from this, because in some cases a single tree produces as much nourishment as a large area on which gregarious plants grow. It is remarkable that many of the plants used and cultivated are not edible without special preparation, on account of their taste or because they contain poisonous substances. Examples are the cassava potato and acorns. Some have lost these qualities under cultivation.

All early agriculture was practised without the help of domesticated animals. It was analogous to our cultivation of plants in gardens. The invention of the plough and with it the use of draft animals for tilling fields is a late invention of the people of the northern half of the Old World.

Shelter. In earliest times man dwelt in natural shelters such as caves. The labor bestowed upon representations of animals in the caves indicates that his stay in the caves was continuous. The kind of shelter erected in the cave or outside is not known. Some people uti-

lize caves even now. Among modern tribes the simplest shelter is a windbreak erected of poles and filled in with branches. More complicated are double windbreaks that offer shelter from two sides and tents that are closed all around. In some regions shelter is sought in subterranean or semi-subterranean dwellings. While these structures serve a number of individuals as protection against climate and partly against attacks of wild animals, the individual is sheltered by clothing. In the arctic climate life without clothing would be impossible; but in more temperate zones the requirements of clothing are variable. The Fuegian in a tempestuous, wet and chilly environment and the Indian of Vancouver Island exist with very little clothing, while in some tropical regions, as in Uganda, the whole body is covered. Climate alone does not account for the kind of dress used.

Inventions. The specific methods of procuring food and shelter depend upon inventions. The earliest art of which we know is the shaping of brittle stone by means of flaking and chipping, for use in striking, breaking and scraping. Implements of this type belong to the early quaternary. The art is almost universally distributed. It is likely that wood in the form of sticks was also used, but wooden implements have not survived the ravages of time. The skill in handling brittle stone gradually increased and the forms became more elaborate and specialized. The shaping of tough stones by pecking, polishing and drilling occurs in Europe much later. Toward the end of the earlier palaeolithic period fire had been discovered and was presumably used for obtaining warmth and for preparing food. On account of the difficulty of obtaining fire it is carefully kept in rotten logs or other forms of slow-match. It is claimed that the Andaman Islanders do not know how to make fire, that they keep up their fires continually. Fire is most frequently produced by drilling, less frequently by a sawing or cutting motion. It seems likely, therefore, that the production of fire was learned from these processes, and at a time when drilling and cutting tools were made of wood. The use of fire for preparing food is difficult to understand. Without long experience scorched and burnt animals found after a fire of natural origin cannot have been attractive, on account of the strangeness of taste and smell; and it is difficult to see how it happened that the experience was presented with sufficient frequency to become attractive. It is still more

difficult to understand the discovery of boiling. Many modern tribes boil by throwing red hot stones into water contained in a box or basket. This is presumably the earliest method of bringing water to a boil. It would seem that the only experience that could lead to this result is presented in cases where a stream of lava runs into a pond, bringing the water to a boil and cooking the animals living in the water. To make use of this observation the invention of containers for water and the appreciation of boiled food were required. Experience with fire also led to its use in hardening, shaping and hollowing out wood.

An important step in the development of implements was made when two pieces were united together. The earliest stone implements were merely held in the hand. Later on the stone was attached to a handle and in the further development of tools the elaboration of the handle is almost more important than that of the working tool. The art of combining different parts into a unit is also the basis of sewing and weaving.

The invention of pottery was not made until after the end of the palaeolithic period. Even now pottery making is not universally distributed. The discovery may have been made when food was roasted or steamed in underground ovens made in clayey soil. People whose habits require a frequent change of dwelling place do not use pottery on account of its fragile character. It presupposes permanence of a dwelling that, however, may be occupied only seasonally. In many parts of the world pots are made of strips of clay that are built up spirally, in coils. This suggests a relation of the technique of pottery to that kind of basketry which is made by sewing together coils of fibrous material.

Wood, bark, bone and horn are shaped by cutting, shaving, drilling and polishing. They are bent by steaming. Pieces are joined together by tying, sewing and pegging; sometimes also by gluing.

The use of skins required methods of preservation to avoid rotting and stiffening of hides. Both mechanical and chemical means are applied to this end, such as scraping, application of various substances for curing, and smoking.

The invention of basketry may have antedated that of pottery. Weaving by intertwining coarse materials and coiling by sewing together spiral coils of fibres or twigs are the processes applied. Weaving of cloth developed through the substi-

tution of spun hair or plant fibre for stiff intertwined materials.

The most important step in industrial development was the discovery of the use of metals. Locally pure copper was used like stone. It was hammered into shape. In Babylonia and Egypt the reduction of copper ores was known in the fourth millennium B.C. About the middle of the third millennium bronze, an alloy of copper and tin, appeared in Egypt, first containing a small amount of tin which gradually increased to about ten percent. In America bronze was also invented and used in Peru and in parts of Central America. Iron appeared in Egypt in the twelfth century before our era. It has never been used in aboriginal America, except in a few cases in which pure meteoric iron was available.

The impetus to many inventions must have come in the work of procuring food and shelter. The gathering of roots led to the development of instruments for breaking the soil. The effective accumulation of seeds, berries and other vegetable food supplies was made possible by the construction of receptacles which also facilitated the preservation of supplies and their protection against the ravages of small animals. Bark, wood and basketry were used both for carrying and preservation.

The killing of animals brought about the development of means of overtaking and overcoming them. Weapons for throwing served to wound them; pits and traps were employed for holding and killing them. Masses of skeletons of the mammoth and of horses found as remains of periods in which hunting implements were still apparently ineffective suggest the use of pits and of the battue. The use of pits is also suggested by some palaeolithic rock paintings. At the end of the palaeolithic period bow and arrow, spears and throwing sticks were in use. Harpoons and fishing implements were also made in this period.

The various inventions were also utilized for the construction of dwellings. Simple mechanical devices for lifting heavy beams must have been developed in connection with the erection of habitations intended to shelter many individuals. Stone architecture was a late development. Stone enclosures or more complex structures were probably first used for graves, as evidenced by early stone circles, stone cysts and dolmens. Stone architecture developed in the eastern Mediterranean and in the plateaus of South and Central America.

The acquisition of tools, implements and

other property requires means of transportation in cases of removal from one place to another. In addition to the receptacles already mentioned which were carried by man, means for transporting heavier loads on sliding conveyances were required. Domesticated animals were used for carrying and hauling, and special means of locomotion on snow, like sledge and snowshoe, were invented. The wheel is a comparatively late acquisition confined to parts of the Old World. The use of regular routes of travel, such as are found also in animal life, created trails through the woods and brought about the discovery of fording places. Much later, trails were artificially developed and rivers or valleys crossed by primitive bridges. Navigation must have developed at an early time. Without it the peopling of islands would have been impossible. The simplest forms of transportation by water are rafts made of wood or bundles of floating plants, but we also find at an early time the dug-out. The canoe made of ribs covered with bark or hide and the plank boat are later inventions.

A number of inventions deserve special mention on account of their complexity and the proof they give of the ability to profit by the observation of complex phenomena. Bow and arrow belong to this group. In Europe the rock paintings of Spain give evidence of the inventions of these before the close of the glacial period. In all probability the experiences gained with spring-traps may have helped to develop the invention, but there could have been no immediate observation that would lead to it. The intricacies of the flight of the Australian boomerang were observed in the peculiarities of the flight of thrown sticks, but it required an incredible amount of experience and of acute observation to discover that the inclination of the planes of the two arms towards each other is the condition under which the observed and desired movement is obtained. Another unusually complex invention is that of sailing by the wind which the Micronesians use: the shifting of the mast; reversing of bow and stern in order to keep the outrigger on the lee side; but particularly the difference in curvature of the sides of the Marshall Islands canoe which serves to prevent the turning of the canoe in the direction of the outrigger. The Negroes of Africa reduce iron ores in furnaces in which the ore and charcoal is placed in alternating layers and in which increased heat is produced by a system of bellows that supply the furnace with a constant current of fresh air. This art is widely spread

over Africa and may be a discovery of the Negroes, although arguments may also be given for its invention in western Asia. The early cultivation of plants and domestication of animals disclose other practises that are difficult to understand as discoveries due to the observation of nature. The artificial pollination of the date palm and the gelding of animals may serve as examples. Many other similar inventions may be mentioned in which the opportunity for discovery by observation is exceedingly remote.

Consult: Reallexikon der Vorgeschichte, ed. by M. Ebert, vols. i-xiv (Berlin 1924-29). For modern industries of primitive people: Mason, O. T., *The Origins of Invention* (London 1895); Tylor, E. B., *Researches into the Early History of Mankind* (Boston 1878), and *Primitive Culture* (7th ed. New York 1924); Avebury, J. Lubbock, *Pre-historic Times* (6th ed. New York 1902); Hoernes, M., *Natur- und Urgeschichte des Menschen*, 2 vols. (Vienna 1909; rev. ed. by O. Menghin, 1927); Weule, K., *Die Anfänge der Naturbeherrschung*, 2 vols. (Stuttgart 1921-23); Franchet, L., *Céramique primitive* (Paris 1911); Forestier, G., *La roue* (Paris 1900); Hough, Walter, "The Methods of Fire-Making," in United States National Museum, *Report 1889-90* (Washington 1891) 395-410.

Economics. In primitive society men and women cooperate in gathering the necessary food supply. A fundamental difference due to physiological causes is found in their activities. Childbearing women during pregnancy, when nursing young children and when caring for a number of children, are less mobile than men. They are unable to move rapidly over great distances and hence their lives are spent in or near the camp. For this reason we find that among all hunters and fishermen the men occupy themselves with the chase and with fishing, while the women gather vegetable products and slow moving or stationary animals that are within reach of the camp, and perform all the work that pertains to the camp. Secondarily it follows that the men prepare the utensils for the chase while the women work on the utensils and implements used in camp. Stone and wood are the principal materials used by the hunter. Hence the man performs work in stone and wood. He uses hammer, knife and drill. Normally the woman works on meat, skin and fibre; she cooks, preserves food, prepares skins, spins, sews and weaves baskets and cloth.

The woman's work is largely devoted to the gathering and handling of plants. In technically somewhat more advanced communities the whole agricultural work falls to her share while the men are unfamiliar with the raising of plants.

It is therefore probable that the art of agriculture was developed by woman. The men, on the other hand, are constantly occupied with the chase. In technically more advanced communities they take care of the domesticated animals. Accordingly it seems likely that domestication of animals was developed by the men. The theory that domestication developed from the habit of keeping pets, a practise common, for instance, in South America, is not tenable, because an essential trait of domestication is the free reproduction of the herd, a condition not found among pets, and also because pets are cared for by the women, who do not occupy themselves with domesticated animals.

In most cases the typical division of labor according to sex continues until some type of labor that in simple communities is performed by man is utilized for the further development of agriculture. This is the case when irrigation or building of terraces is required, or when the help of domesticated animals is introduced in agricultural work, as in ploughing.

Even in simple forms of society there is further division of labor according to individual preference. When hunting and fishing are practised, some men devote themselves by preference, or even exclusively, to the one or the other occupation. Among the Chukchee there is a differentiation between maritime dwellers who are sea hunters, and reindeer breeders. Members of the same family may belong partly to the coast people, partly to the inland reindeer breeders. Some individuals, skilled in particular industrial pursuits, devote themselves to these and furnish their tribe fellows with the products of their labor. The person who is endowed with the power of curing disease and of communicating with the supernatural world is a professional in the strict sense of the term.

In somewhat more complex societies, as among the Africans or Polynesians, there is a much more highly developed division of labor. No longer are all the industries carried on in each family group, but there are definite trades; in Africa, particularly, the blacksmiths, in Polynesia the carpenters and boat builders.

When the social structure is more complex, hereditary groups may take over definite functions. In North America some special division of the tribe may furnish the warriors; in the region of the Great Lakes of East Africa agriculture and herding are carried on by distinct hereditary divisions of the tribe. On Vancouver Island whaling was the privilege of a small group. In

the civilized states of America, as well as in Egypt, the division of trades was very elaborate.

The feeling for property rights is not confined to man. Both individual and social property rights are found in the animal world. The woodchuck owns its hole; the bird its nest, sometimes even its surroundings; the squirrel and mouse their stores of winter provisions. Animals defend their property against strange individuals or groups. Eagles drive away other birds of prey, monkeys and kangaroos have their own limited territories which they defend against invasions. In all groups of primitive man there is a feeling for property of the individual in objects made or constantly used by himself, and of groups in the territory they occupy. Food, while individual property, is generally shared with members of the group. The individual has absolute control over objects made or constantly used by him, as long as their destruction does not involve loss or danger to others. Human property differs from that of animals in being transferable in the form of presents or exchange. Property is not only individual or tribal; it may also belong to tribal divisions (see *infra*). The tribal territory may be so subdivided, and social groups may have common property interests in other valued objects. Many of the individual or group property rights might better be called social privileges. Individual property or an individual privilege in which a group has a claim of participation must pass from the holder in the case of death, or sometimes even during his life, to other members of the same group. These conditions are expressed principally in the customs regulating inheritance. The range of objects that may be considered as property is very wide. Not only material objects are property, but also songs, tales, position and other privileges.

Since even in the simplest forms of society a differentiation of occupation exists, at least in so far as the sexes contribute different parts of the sustenance and are engaged in different industrial occupations, and since furthermore a pronounced feeling for property rights exists, we find also customs regulating the exchange of produce. In the small family both parents generally contribute to the support without consideration of the value of the goods, but when the family breaks up, the man and the woman each claim as their property what they have collected or made, and in general in exchanging goods or making presents to outsiders their respective ownership manifests itself. These conditions are more complex whenever a more elaborate

division of labor exists, so that a family is no longer economically self-sufficient. In most forms of primitive society such exchange is made by barter or by rendering service. M. Mauss has pointed out that the fundamental principle of exchange is the obligation of accepting a present and the consequent obligation of the return of an equivalent. The Chukchee reindeer-breeder exchanges furs for seal-meat and thongs obtained from members of his own family or from others who dwell on the seacoast. The Indian of the western plateaus exchanges dressed deer-hides for dried salmon. Another form of payment occurs when valuable appliances are borrowed for purposes of productive work or when in a cooperative enterprise one individual furnishes the needed appliances, such as a canoe or nets. In these cases the participants share in the product of their work but yield to the owner of the appliance a specific privilege. A member of a family group is also considered as a valuable asset. This finds expression both when compensation is demanded for a death caused by an outsider and in the payments or service demanded in exchange for the privilege of marrying a girl and taking her away from the family unit. Although other attitudes play an important role in these cases, their economic import must not be neglected.

There are few tribes that are absolutely self-sustaining. Most of them obtain from neighbors some necessities, such as salt and iron in Africa, and shells and, in later times, horses in America. In extreme cases a tribe may take up a specialized occupation and rely for everything else upon its neighbors. An outstanding example are the Toda in India who have given up almost everything for a milk industry. Exchange with neighboring tribes is generally by barter, in cases of mutual fear by silent barter, the objects of exchange being deposited and left, either to be taken up and exchanged or refused by the second party. When barter is more regular, a standardization of values occurs. In Africa, on the islands of the Pacific Ocean, and in many parts of America values are measured by standards. Some of these may be used for practical purposes, while others, although useful, are handled only as representations of values, that is, as money. In Africa salt, iron in various standard forms, and cattle serve as standards of wealth. All of these may be used, while the usefulness of shell money which occurs, for instance, in Africa, Micronesia and America is restricted to the manufacture of

ornaments. On the north Pacific coast of North America blankets, canoes and copperplates representing certain values are in use as standards. In some parts of East Africa wealth is measured solely by cattle, not by any other kind of possession.

Wherever a highly developed system of exchange exists, we find also systems of credit. The amount given is repaid by exchange or in money value at a later time, either without or with interest. When it cannot be repaid in substance it may have to be repaid in service. An extreme form of this institution is found in the bonding of members of a family in debt, which prevails in many parts of Africa.

War, notwithstanding its numerous other affiliations, must be considered as a form of economic activity, for most wars or raids among primitive people are waged for the acquisition or retaliatory destruction of property, including the values inherent in human life. The horse stealing raids of American Indians, the cattle and slave raids of Africans, and the plunder of villages in Melanesia are examples. In arid countries the possession of water, among herders the need of pastures, have led to armed conflicts between those who try to acquire them.

Consult: Cunow, H., *Allgemeine Wirtschaftsgeschichte*, vol. i- (Berlin 1926-); Schmidt, M., *Grundriss der ethnologischen Volkswirtschaftslehre*, 2 vols. (Stuttgart 1920-21); Koppers, W., "Die ethnologische Wirtschaftsforschung" in *Anthropos*, vols. x-xi (1915-16) 611-51, 971-1079, a general historical review.

Social Organization. Man everywhere lives gregariously, and a local group varying in size forms a unit firmly coherent in its relation to outsiders. In the same way that many gregarious animals form closed societies which do not admit strangers of the same species, so in primitive society every local unit forms a closed society hostile to all outsiders. This is clearly expressed by the frequent custom among primitive tribes of designating themselves as "human beings," all outside groups by specific terms. There are probably no tribal units in existence now that have exclusively hostile relations to their neighbors, but suspicion and avoidance are very common. The feeling of community of interest of the members of a closed group is characteristic of even advanced types of human society.

Free sexual relations and marriage must be clearly distinguished. Free relations are the result of sexual passion, marriage involves property relations. Although in many cases free

premarital sexual intercourse is forbidden and, if discovered, punished, there are numerous cases in which it is permitted or is even required, except among individuals who belong to an incest group (see *infra*). Marriage is often easily terminated, until in old age a more permanent relation between husband and wife develops. Personal attachment between two young individuals is often passionate and accompanied by jealousy, but temporary. Abnormal sexual habits, such as homosexuality, have been observed among many primitive tribes. They may be explained as an effect of domestication common to man and highly domesticated animals.

The position of the individual in the social group is determined by age, sex and membership in a fixed subdivision usually consisting of descendants of a common ancestor, immediate or remote, known or assumed.

Infants and young children are dependent upon adults and therefore occupy a special position in the social unit. As they acquire greater independence they may continue to be grouped by age classes or they may merge in the general population. The old-age group which loses its economic independence is also often set off from the active population. The period of adolescence and complete maturity also brings about the formation of separate groups. Individuals passing through these stages at approximately the same time may continue throughout life as a group that retains its individuality, as in East Africa, or they may be advanced through a number of groups differing in functions and characteristics. Generally the more detailed age groupings are more pronounced in the male sex than among females.

A fundamental difference prevails in the social position of the sexes. It is due to the difference of their biological functions and the resulting difference in economic position, men being hunters, women food-gatherers; men herders, women agriculturists, at least in most of the simpler forms of human societies (see p. 82).

Since on hunting expeditions and in war men work in groups which need a leader, social recognition of leadership belongs almost always to the man. Woman's work is more commonly individual or at least does not require leadership.

In the daily life of primitive man the family group is the most important unit. It consists normally of parents and children. The family forms the economic unit in the life of hunters who live in infertile areas, for each group needs

a large area for its sustenance. The mother cannot procure sufficient food for herself and her children, and a male is needed to maintain the family. The human family unit is analogous to the family unit of animals.

The relations to one another of individuals constituting this group depend upon the relation of the family to the larger social group of which they form a part. In almost all forms of human society the family consisting of parents and children forms an incest group, sexual intercourse between parents and children and between brothers and sisters being forbidden. The mature children must seek mates in other family groups. If the original family does not separate completely after the establishment of new families by the children, relations are established that give rise to a great variety of forms. These complications are bound to arise where families do not live in temporary isolation, but occupy jointly a village or a limited territory in which communication is frequent.

Three fundamental forms controlling the interrelation of families are possible and do occur. First, the family may be a firm unit and the relations of the children to father and mother may be the same. This is called a family with bilateral descent. Second, the man who marries a daughter of a family may come in as a stranger and may remain more or less an outsider, while the daughter's children may be considered as born to the family and members of the family. In this case there is a close relation between mother and children, a loose relation between children, relations-in-law and father. Third, the son may take a wife from another family into his own family, so that his children will be members of his own family while his wife remains an outsider. In this case a close relation exists between father and children, a loose relation between mother and children. The second and third are families with more or less clearly recognized unilateral descent, the second matrilineal, the third patrilineal.

Social status is largely a reflection of such relationships. In a small community in which bilateral descent prevails, the concept of the family as an incest group cannot be extended over the later generations. If it were, the whole tribe would become a single family and marriages in the group—endogamic marriages in the tribe—would become impossible. All marriages would have to be with foreign tribes, and tribal exogamy is the concomitant of this condition.

In both cases of unilateral descent consciousness of family relationship in later generations may be preserved and leads to large exogamic groupings in the tribe. This is possible only in two cases: when the terms of relationship are not individual, but extend over classes of individuals so that a whole group may be recognized as members of an incest group or as outsiders; or when a certain symbol holds together the whole large family group, such as a name, a particular kind of dress, or practises others do not share.

When a common term is used for the mother and all her sisters, when the children of this group of sisters call one another brothers and sisters and when this designation is carried through the generations, combined with the conceptualization of brothers and sisters as an incest group, the tribal unit will be divided into a number of exogamic units. If the tribe is small and no accessions to these groups occur and if, for some reason, they do not split up, this will ultimately lead to a dual division, owing to the unavoidable extinction of most of such lines of descent. The same result is obtained when the unity of the later generations is preserved by a common name or by some other symbol. Conditions of this kind are generally designated as totemism. The totemites share a name, a symbol, beliefs or rites.

The principles according to which relationship may be conceptualized vary considerably. The most frequent principles are sex of person spoken of; generation; collateral or direct line of descent; relative age; sex of an intermediate relative, as in terms of maternal or paternal descent or in terms of affinity through wife or husband, sister or brother; sex of speaker; death of an intermediate relative, as, for instance, death of mother in the term used for a maternal uncle; social rank. The combination of these principles of classification vary considerably, and many of them may be omitted. When the principle of generation is omitted, all the males of the mother's line (in the case of matrilineal descent) may be designated by the same term. When sex of the intermediate relative is considered, there may be four terms for cousins, as father's brother's child, father's sister's child, mother's brother's child, mother's sister's child. In the same way as in our term "brother" relative age is disregarded and the term is reciprocally applicable, generation may be disregarded, so that one term may designate the reciprocal relations between uncle and nephew or between grandfather and grandson.

The incest groups vary in character. When the fraternal and paternal nomenclature is extended, as described before, and exogamy is adhered to, the whole group so designated forms an exogamic unit and there is a sharp distinction between parallel cousins (that is, the children of two brothers or of two sisters—in matrilineal society the children of sisters, in patrilineal society the children of brothers) and cross cousins (that is, children so related that the father of one group of brothers and sisters is the brother of the mother of the other one). The former, as brothers and sisters, belong to the incest group; the latter belong to different families and may, or even must, intermarry.

Endogamy is found in local units. Marriages outside of the tribe or village may be forbidden. In India the basis of endogamy is caste, based largely on occupation. In Australia its basis is generation. Individuals of even generations may not marry members of odd generations. Both in India and Australia endogamy is combined with exogamy. In India the caste is subdivided in exogamic family lines. In Australia the whole tribe is divided into generations and into exogamic moieties. There may even be a double system of these, giving rise to a most complex system of marriage regulations.

In most cases the regulations preventing sexual relations in the incest groups are felt as absolutely binding. There are, however, cases in which sexual relations in the incest groups are considered as condonable.

Exogamy and endogamy are extreme expressions of a differentiation of behavior in the group of relatives both by consanguinity and affinity. Some relatives may be exceedingly free in their social intercourse. They stand in the positions of "joking" relationship. Others have to be treated with extreme respect, which sometimes takes the form of absolute avoidance. This occurs particularly between mother-in-law and son-in-law. It is generally felt as an expression of respect. Avoidance and familiarity are related to actual or potential sexual relations between the sexes, or to community of sexual interests.

From the interrelation between social position and sex, social leadership generally belonging to the men, a peculiar contradiction results in all cases of matrilineal descents. When social position belongs to a family line it cannot be transmitted from father to son, but must be inherited from a male of the mother's family, that is, from the maternal uncle. This is frequently the source of the avunculate, although

prominent position of a woman's brother in the family unit may bring about similar conditions without matrilineal descent. Since often the mother's brother does not belong to the same economic unit as that to which his sister belongs, a certain weakness is inherent in the avunculate and it is liable to give way to systems in which inheritance and descent are combined in the same sex.

The constitution of the family is dependent upon the numerical relation of mates. There are four possibilities: several men may be mated with several women; one man with several women; one woman with several men; or one man with one woman. All these forms do occur, most frequently the union of one man with several women (polygyny), or of one man with one woman (monogamy). The two other forms, polyandry and group marriage, are rare.

If polygyny is combined with permanent matrilineal residence, the wives must necessarily be sisters; if combined with patrilineal residence, they do not need to be related. In Africa polygynous households consist of a number of separate houses, each being presided over by one woman. Since marriage is always accompanied by a transfer of property rights, often by exchanges between the two families, or presents or payments made by the groom's family to the wife's family, the relationship between husband and wife is involved in these transactions. In case of payments made by the groom's family, the deceased wife's sister may be claimed as a substitute; or after the death of the husband his brother or son from another unrelated wife may claim the widow. In other cases the deceased husband's brother may be claimed as a substitute by the widow's family. Both these forms, sororate and levirate, are expressions of the property relations between families. In some cases they lead to apparent group marriages between brothers and sisters. In exceptional cases women of different generations, such as mother and daughter, may be involved in these relations.

There is no evidence that any one of the four forms of marriage was the original form. It seems rather probable that according to economic and other conditions of life one or another form developed.

Groupings consisting of relatives by consanguinity and affinity occur everywhere. In many primitive societies, particularly in those in which the local unit embraces larger numbers of individuals, other types of social groupings oc-

cur, some very firmly knit, others rather loose. These groups are held together by their social functions: occupational, political or religious. In many cases we find clubs embracing age classes of one sex, particularly young men. In others military societies occur which have definite duties or privileges in military undertakings. In extreme cases, as in some parts of Africa, they form regular regiments in an army. In still others they perform police functions. There are also societies that are pitched against one another in games and those charged with religious activities, like the shamanistic societies of the Pueblo Indians or those of Melanesia.

In some cases these societies are identical with the groups based on actual or supposed consanguinity, or they must be recruited from their membership. For example, one of the divisions of the Omaha tribe which is viewed as consanguineous is charged with the defense of the camp circle, another one functions as keeper of the sacred objects of the tribe. The societies are likely to surround themselves by secrecy, their activities, teachings and functions being known only to members. Often all the adult males form a group from which women and children are rigidly excluded. Intrusion is punishable by death or other heavy penalties. Meetings of the society are held in secrecy and guarded by the use of musical instruments, such as the bull-roarer or whistle, that keep outsiders away. Hereditary rights to membership in a society imply either that the society is identical with one of the family groups or sibs, or that its members are selected exclusively from one family or sib.

As the family groups may have associated to themselves a name, symbol, privilege or rite, so the societies are apt to assume the same characteristics. Probably all societies have names. Many are characterized by their dress or, like the African military groups, by the decoration of their paraphernalia. The societies of British Columbia differ in rank and possess privileges. Whenever a religious element is involved in these organizations, they have rites of their own and supernatural protectors appear in the same way as in family groups. The forms of these phenomena are analogous to those of totemism, but attach to a society instead of to a group considered as consanguineous.

On account of the secrecy involved in the organization of these associations new members must undergo a course of instruction. Its character differs according to the character of

the society and to the manner of acquisition. When membership is attained by purchase of a seat in the society and when the prerogatives of the society are purely formal, no elaborate instruction may be necessary because the society has no esoteric teachings. In other cases the novice may be compelled by the older members, or by the prevailing custom, to join and there may be an elaborate course of instruction, often connected with complex rites of initiation. In this case the entrance into the society is often coincident with adolescence and is of a religious character (see p. 102).

The size of the social group varies. In extreme cases all the males may form one association. The other extreme is reached when a social group consists of a single individual only. Between these extremes all possible sizes of groups are found.

The existence of any type of grouping is accompanied by stratification of society. Single individuals, as well as social groups that claim any kind of social distinction, are segregated from the general mass of the population. The segregation does not need to be based on the forms of society referred to before, but may be due to individual prominence in some capacity: experience and skill as hunter, fisherman, herder, agriculturist or warrior and consequent wealth; skill in arts; in helping the sick; in real or supposed possession of unusual qualities. All these may insure to the individual unusual prominence in his community. A different kind of stratification results from the privileges or powers of a closed society, in which all the members on account of their membership form a privileged class. When membership is determined by consanguinity we have a hereditary nobility. In other cases a hereditary priesthood or other similar forms result. The unity of the tribe depends largely upon the functions and mutual relations of these associations. When their activities are correlated, or when they form an integrated series in which leading individuals or associations control the others, the tribe will form a well organized unit. The control may be based on friendly relation or may be forced, as in cases of subjection of one class by another, or of a conquered unit by its victors. When they are uncoordinated the tribal unit will be loose.

In the limits of the group, no matter whether it is held together by consanguinity or by functioning, the members are subject to the rules of the group, which are supreme. Breach of these rules is resented or even punished. In this sense

the group is analogous to the state, from which it differs because it does not unite all the members of the community in one whole, subject to common rules of behavior. The more complete the coordination or subordination of these groups, the more will the political organization approach our concept of a state. Since cohesion of the groups implies constant contact, possibility of communication and local contiguity are necessary elements in the formation of well integrated groups. Examples of uncoordinated groups are family groups or sibs that require mutual aid among the members and joint responsibility against outsiders, as in blood feuds, religious societies, like those of the Dakotas, which are held together by similar revelations, and many of the military societies of the Plains Indians. Coordination and subordination are characteristic of many of the politico-religious societies of Africa and of political organizations such as the League of the Iroquois. In some cases the separate, uncoordinated groups may form temporarily coordinated associations, as in the case of the Plains Indians during the buffalo hunt, when they are subject to a particular society that performs, temporarily, police functions, or the sibs of the Kwakiutl, which, whenever a village has dealings with another village as a whole, become a unit.

Consult: For older important literature: Morgan, L. H., *Ancient Society* (New York 1877); Maine, H. J. S., *Ancient Law* (10th ed. London 1906); McLennan, J. F., *Studies in Ancient History* (2nd ed. London 1886), and *Studies in Ancient History*, second series (London 1896); Bachofen, J. J., *Das Mutterrecht* (2nd ed. Basel 1897). A more recent point of view is represented by Lowie, R. H., *Primitive Society* (New York 1920), and *The Origin of the State* (New York 1927). See also Rivers, W. H. R., *Social Organization* (London 1924); Webster, H., *Primitive Secret Societies* (New York 1908); Schurtz, H., *Altersklassen und Männerbünde* (Berlin 1902); Westermarck, E. A., *The History of Human Marriage*, 3 vols. (5th ed. London 1921); Frazer, J. G., *Totemism and Exogamy*, 4 vols. (London 1910).

Law. Ordinarily the individual is not restrained in his actions so long as their effects concern only himself. As soon as his actions have a bearing upon the well being of his fellows a customary behavior is demanded which may be designated as customary law. Its domain is intimately associated with the general social and religious concepts of the community. Property rights are guarded. When a forbidden marriage is planned and it is believed that it entails dangers to others, it will be prevented. When the breach of a tabu is considered as

dangerous for the community, observance will be enforced. Interference with the individual who plans an action detrimental to himself may emanate from his family or his friends. He may also be shunned, because his action is condemned, or because intercourse or contact with him may be dangerous. Behavior in these cases is not regulated or enforced.

In many cases, particularly in America, customary law is obeyed merely in deference to public opinion. There are no restrictions that serve the enforcement of the law, excepting police organizations that control communal undertakings such as the gathering of fruits, the hunt or war. These are charged not with judicial function but merely with executive control. In Africa, on the other hand, a most elaborate system of judicial procedure is found almost everywhere. It uses the taking of evidence, the oath and the ordeal, and is strictly comparable to European and Asiatic forms of procedure.

Where public opinion controls, the individual crimes that affect the community may result in the killing or driving out of the criminal, or ways may exist by means of which the effects of the crime may be warded off—by purification or other religious means. There is no set punishment or compensation. When the evil results can be warded off there is no punishment. On the other hand, infractions that affect the interests of individuals or of groups of individuals are settled by revenge taken on the perpetrator or on a member of his group, according to the principle of retaliation. The damage inflicted in revenge must not exceed the original one. In other cases compensation may take the place of retaliation. A life may be redeemed by payments adjusted to socially established valuations. Wherever strong solidarity of a group occurs, responsibility is not individual but rests with the group. Actual law giving machinery and imposition of arbitrary fines are common in Africa but are rare or absent in other areas.

Customary law is binding only in the social group. The relations to outsiders are commonly unsettled, although in many cases customary law regulates intertribal commercial intercourse, and forms exist that provide for the avoidance or termination of hostilities.

Consult: Post, A. H., *Grundriss der ethnologischen Jurisprudenz*, 2 vols. (Oldenburg 1894-95); Letourneau, C. J. M., *L'évolution juridique* (Paris 1891); Kohler, Josef, and Wenger, Leopold, *Allgemeine Rechtsgeschichte* (Leipsic 1914), introduction and pt. A; *Zeitschrift für vergleichende Rechtswissenschaft* (Stuttgart 1878-).

Leisure. When the necessity of procuring food and shelter does not fill all the time of waking life, either because the food supply is plentiful and easily obtained or because the ample supply of one season is laid up and man lives in the intervening season on accumulated stores, the leisure time is spent in a variety of occupations. The total amount of tangible property that constitutes the possessions of a household depends largely on leisure time, on the permanence of abode and, in migratory tribes, upon facilities of transportation. The variety of household goods increases with the amount of leisure time. Besides this, time becomes available for activities that do not serve the immediate needs of life, and complications of technique, social gatherings and religious rites of various kinds have opportunity to develop.

In early childhood no contributions to the maintenance of the tribe are demanded and hence young children pass their time playing. Much of their playing is imitation of the occupations of their elders and a differentiation according to sex may be generally observed, the boys imitating man's, the girls woman's, work. Besides this, amusements in great variety occur: ball games, spinning of tops and plays based on personal dexterity or strength. Parents play with their young children, often accompanying the game by the singing of ditties. Adults also have games of individual dexterity, such as the making of string figures or contests in wrestling or running. Formal ball plays and racing according to set rules are common. Games in which the whole village may be divided into two units are often accompanied by betting. Games of chance, of the most varied character and played according to intricate rules, are found almost everywhere and lead often to a high pitch of excitement.

Consult: Culin, Stewart, "Games of the North American Indians" in United States Bureau of American Ethnology, *24th Annual Report, 1902-03* (Washington 1907) 1-846; Groos, Karl, *The Play of Man*, tr. by E. L. Baldwin (New York 1901).

Art. The influence of leisure upon technique is most important. It is characteristic of almost all untouched primitive culture that the technical skill exhibited in all kinds of manufacture is very great. Slovenly work has no place in primitive culture. Even when the members of the family have to provide all their weapons, implements and utensils, these are made with skill. This is still more the case when the technique used in various kinds of manufacture is

the same for most of the needs of the people, as among the Californian Indians, who use basketry for all their household utensils. As more time is devoted to a particular industry, skill becomes greater, and when sufficient leisure is available, joy in the skill acquired leads to a play with the technique that is one of the sources of artistic form.

The mastery of technique results in regularity of outline and of surface in the manufactured object, and there is evidence of the satisfaction felt in their achievement. In some cases the virtuosity displayed in the manufacture is not visible in the resulting form. The satisfaction can therefore lie mainly in the pleasure given by the control of the difficult technique, only secondarily in the regularity of form. Pleasure in virtuosity is the stimulus that leads to the development of complex forms.

The fundamental lines found in all manufactured work are the results of technical processes. The straight line is rare in nature, but is produced whenever a fibre or string is drawn tight or when the same process is carried along by a sure hand. Regularity of curves and circular forms result in basketry and pottery; spirals, in the coiling of thongs, ropes and wire.

Rhythmic repetition is also a necessary result of technical skill, for the regularity of movement involved in skill leads to the regular repetition of the same forms. The more complex the group of technical movements that produce a form unit, the more complex is also the rhythm. Less intimately related to the technical processes is symmetry, which although not universal is of frequent occurrence. Symmetrical forms result in basketry and pottery, but they are not so definitely the results of technical processes as the straight line, the regular curve and rhythmic repetition.

Every technique, as locally developed, produces fixed forms because the same technical processes are employed by all. These forms constitute the basis of the local art style. Without fixity of form art is impossible. The increasing complexity of technique, due to the development of virtuosity, often directly produces surface patterns. This is particularly noticeable in basketry but occurs also in stone chipping, adzing of wood and hammering of metal, whenever the work is done in complex rhythmic regularity. It is necessary to assume that these forms were felt as attractive, for the further development of the surface by decoration does not follow directly from technical needs. It may

be observed that borders are emphasized, that prominent points are elaborated and that entirely adventitious forms are produced which have no relation to technical processes. These also follow fixed rules of arrangement. The mental effect of all these products is based entirely on the pleasure given by virtuosity and by a feeling for form.

Representative art has an entirely different source and appeal. It springs from the desire to represent some interesting object and its appeal is based on the contents and forms of the representation. So far as it is merely representation without skill, it has only the slightest relation to art. When executed with technical skill it has the double appeal of content and form. Representation can be made skilfully only in a technique in which virtuosity has been attained. The technique must therefore exert an influence over the form of the representation. The technical style will influence the style of representation. This may be particularly observed in weaving. The arts which allow the most naturalistic representations, on account of the flexibility of their materials, are pottery and carving. The most realistic representations are in the pottery of Peru or the Sudan and in the carvings of the Eskimo. In many other cases the rigidity of the art style will not admit realistic representation even in these materials. In representations of three-dimensional objects on a plane two methods are used, a symbolic one in which all those parts of the object are shown that appear to the maker as essential, without regard to their position; and a perspective one in which a view from a single viewpoint at a single moment is given. The former method is most rigidly developed in the art of the Indians of the north Pacific coast, the latter is characteristic of our classical art. Combinations between the two are frequent, as, for instance, in ancient Egyptian art in which the whole representation consists of a composition of a number of forms in perspective each seen from a different viewpoint.

Among many primitive tribes the association between technical form and representation has come to be so intimate that all forms are expected to be representative, so that apparently geometrical forms are given a symbolic meaning. In some cases this meaning is fixed for the whole community. In others there are great individual variations of the concepts suggested by forms. The symbolic meaning may be of intense emotional significance or it may be merely a name assigned to a form. In some cases

it can be shown that the meaning is read into a design which may be further elaborated according to the idea once suggested, or it may be an old representation which has become conventionalized by use or by the compelling force of an inadequate technical style or by the compulsion of stylistic requirements of space.

Art style is one of the "patterns" that characterize the thoughts and activities of every social unit. It is closely connected with motor habits, but no less with habits of formal arrangements. Every representation is subject to the molding influence of style. Its form is a result of the application of the style, and the style cannot be explained as a result of conventionalization of patterns. There may also be more than one style when different types of technique develop in a tribe, owing to a differentiation of occupations. More frequently one of the types of technique most productive of decorative forms imposes its style upon all the others.

On account of the close interrelation between technical skill and decorative art those parts of the population are the most productive and inventive that do most of the technical work. On the north Pacific coast the bulk of the industrial work consists in wood carving and is done by the men. In California the principal industrial occupation is basketry, which is done by the women. Hence the men are the creative artists in the north, the women in California.

Most primitive art is decorative. It consists of designs applied to useful objects. Works of fine art, made for the sake of art alone, are rare. Small representative carvings of the Eskimo and rock paintings and carvings of the Bushmen belong to this class. The paintings of glacial man also belong primarily to this class.

In some cases representations have a value only on account of the idea they express. This happens sometimes when objects are made for ritualistic purposes, to be discarded after the performance of the rite; or when the representations or symbols serve exclusively the purpose of communication. The symbolic devices used for the conveyance of messages, such as cowrie strings of varied forms in Africa, the signs set up along trails for the information of travelers, or the message sticks of Australia, are primarily means of communication or mnemonic devices. Sometimes they may have at the same time a decorative function, like the feathers of the Dakota Indians which, by the way they are cut and painted, express warlike exploits. The re-

cording of information by means of pictures has also no artistic aim and is in character generally quite independent of the art style developed in those types of technique in which virtuosity has been attained. Picture writing or its further development into ideographic or hieroglyphic writing assumes artistic forms only when transferred to other artistic industries, as in Central American architecture and painting, or where it is given permanent form in codices.

The conditions for the development of music and literature are different from those for the graphic and plastic arts, because they require a different kind of leisure. While hunting and food gathering, man cannot work with his hands. The time for technical occupation is when he is at rest. On the other hand, the imagination from which spring music and poetry is at work at all times when attention is not concentrated on a particular object. For this reason even those tribes that are poor in industrial and art products, like the Bushmen, have a large body of music, poetry and prose tradition.

In primitive culture poetry is inseparable from music, and the dance is generally accompanied by music and poetry. Poetry and the dance are dependent upon musical form. There are simple forms of song in which the musical notes are sung on meaningless syllables. In others a single word or a name may be interjected between the meaningless syllables. In still others the words are distorted so as to become adjusted to the musical phrasing. Only when the words express consecutive thought may the tune be adjusted to the words, by addition or omission of short musical phrases.

Rhythmic repetition, parallelism of structure, and emphasis are the forces with which primitive music and song operate. The rhythm of primitive music is often very complex. Music uses also sequences of pitch. In some regions the whole range of pitch is very narrow, not more than three tones; in others it is wide. Discontinuous intervals are used everywhere; continuous raising or lowering of pitch occurs as a mannerism of singing. The system of intervals is fixed, although not easily defined on account of the inaccuracies of singing. Almost all primitive singing is in unison. When men and women sing together it is in parallel octaves. Singing in parallel fifths or fourths is rare. On the Admiralty Islands singing in parallel seconds occurs. The intervals are not based on harmony and differ from the scales of the music to which we are accustomed. The accompaniment of song by

rhythmic noises—handclapping, beating of boards, drums or rattles—is universal, and rhythm is sometimes carried along by beating alone. The coordination of rhythms of singing, instruments and dancing is often intricate. A complication arises when the instrument that is struck gives several distinct tones, like the drums of ancient Mexico. A further development of percussion instruments is the xylophone. This and similar instruments occur commonly in Africa. Pipes occur in the form of Pandean pipes, as in Melanesia and South America, and as flutes of several tones. Although reed pipes are used as calls and whistles, their use as musical instruments seems to have been confined to the Far East and to Europe. String instruments occur only in the Old World. The use of instruments must have contributed to the development of harmony, to the fixing of intervals and to polyphonus music.

On account of the interrelation between body movement and articulation—a special form of body movement—it seems likely that rhythmic body movements release rhythmic articulations, that is, song. In this sense songs that consist of meaningless syllables may have their origin in rhythmic movement. On the other hand, the excitement engendered by song leads to movements that are related to the rhythm of song, so that in this sense the dance is conditioned by song. All formally regulated body movements must be classed as dance. The dance accompanying states of great excitement, while adhering to the general local dance pattern, loses in fixity of form; the more formal the dance, the more rigid its adherence to artistic pattern. We find among primitive tribes solo dancing, as in the Arctic tribes among whom dancer, drummer and singer are often the same person, or solo dancing accompanied by a chorus. The most frequent form is the dancing of groups of men or of women placed in definite order and all performing the same motions. When these motions are imitative, the dance approaches a dramatic performance. In some cases the dance movements are accompanied by significant gestures or consist of gestures expressive of the words of the accompanying song. We find even more fully developed pantomimic representations.

In more highly developed song the words give a connected meaning. Many of the trifling songs that have been recorded fail to give an adequate impression of primitive poetry because the visitor hears first of all what corresponds to the

street songs of our times. The subject matter of song is as varied as our own, although in the precarious life of primitive tribes the emotional connotation of the satisfaction of daily needs is infinitely greater than among ourselves. Hence the numerous songs describing in detail the emotional effect of the movements of animal and hunter or of the occupations of the food gatherer. The patterns of interest are very varied. Among the Eskimo we find songs describing the beauties of nature, a variety of songs relating to hunting, domestic affairs, quarrels, songs of religious import, and others expressing love for children, but hardly any love songs. Among some other tribes love songs are found. The language of religious songs or of other songs of serious import is sometimes archaic, or devices are used that make words appear different from the forms of ordinary usage. Metaphoric expressions, cumulative synonyms, parallelism of form, are used as artistic devices. Rhyme and assonance are rare except when they appear on account of repetition of words.

While most of the poetic forms are lyric, prose is either narrative or oratory adapted to public occasions. It is, however, not rare that oratory, as in the case of the laudatory oratory of Polynesia, takes poetic form. Impressive narrative may also assume a semi-poetic form by the regular repetition of meaningless syllables or by taking the form of a rhythmically organized recitative.

Narrative includes tales dealing with events in human society, animal tales, myths and the like. The forms vary according to local style and occasion. While human tales may be told in free form, the impressiveness of sacred myths may be increased by intimating rather than telling their contents. The form varies also according to the purpose of the narrative. Many Negro tribes like to associate their tales with a moral, as in our moralizing fable. In other cases the point of the tale may be etiological.

There has been much speculation regarding the origin of tales. It has been claimed that mythological tales are an immediate reflex of the anthropomorphic consideration of nature and that many apparently non-mythological tales are derived from myths. This theory is contradicted by the varied interpretation given to tales with mythological significance by various tribes, according to their particular mythological interests. Thus the mythological value appears as attached to the preexisting tale. While mythological concepts result from the anthro-

pomorphic interpretation of nature, plots of mythological tales seem to be transferred from the human sphere to mythology. According to this view folk tales and myths must be considered primarily as products of the art of narrative. Their religious significance is a secondary development. Since the tale is an artistic unfolding of the happenings in human society, it must reflect the habits and conflicts of life of the society in which the narrator lives. Themes like the conflict between father-in-law and son-in-law, or between stepmother and stepchild, must be considered from this angle. It is but natural that the tales reflect intimately the cultural life of the people, although in some cases, as in Europe, it may be the cultural life of a passing or past period. At the same time their character depends upon the play of imagination with the conditions of everyday life. Exaggerations of strength, size, abilities; fulfilment of wishes; conditions the opposite of what we are accustomed to, are features of imaginative narrative the world over.

There are fundamental differences in the forms of tales. Among most primitive tribes the single tales are rather short. Often they are connected by being concentrated around a single character, like the transformer tales of many tribes, the tales of Reynard the Fox, or the raven tales of eastern Siberia. A sequence may be established by letting the hero travel through a certain district. Only in rare instances are tales united by an inner bond, like some of the origin tales of Polynesia. Still more rarely are they cast in poetic form and united into epics, like those of ancient Greece and of the Orient.

Mention should be made of two minor literary forms: the proverb and the riddle. These are highly developed in some parts of the world, as in Africa, almost absent in others, as in America.

Consult: Balfour, Henry, *The Evolution of Decorative Art* (London 1893); Boas, Franz, *Primitive Art* (Oslo 1927); Grosse, Ernst, *Die Anfänge der Kunst* (Freiburg 1894), English translation (New York 1897); Haddon, A. C., *Evolution in Art* (new ed. London 1914); Hirn, Yrjö, *The Origins of Art* (London 1900); Riegl, A., *Stilfragen* (Berlin 1893); Scheltema, F. A. van, *Die altnordische Kunst* (Berlin 1923); Stolpe, H., *Collected Essays on Ornamental Art* (Stockholm 1927); Wilson, Elisabeth, *Das Ornament* (Erfurt 1914); Wallaschek, R., *Primitive Music* (London 1893); Stumpf, Karl, *Die Anfänge der Musik* (Leipzig 1911); Werner, H., *Die Ursprünge der Lyrik* (Munich 1924); Leyen, F. von der, *Das Märchen* (Leipzig 1925).

Knowledge. A curious contrast is presented

between the actual control of nature based on precise knowledge and the manifold beliefs and practises of primitive man. The inventions previously described are all the result of acute observation and of practical experience. The knowledge of primitive man extends over the whole field of his experience. He is familiar with the habits of animals and with the life of plants, so far as his practical experience brings him into contact with them. The regular movements of sun and moon are known and lead to calendar systems based on the celestial phenomena, but closely related to seasonal occupations. Measures of space and time are the more elaborate, the more extensive their use in technical occupations and in the regulation of daily occupations. Counting is the more elaborate, the more important the number of equal objects in everyday life. The north Californians have standard measures marked on their hands to determine the value of chains of shells; the tribes of British Columbia count their standard values by tens of thousands; the ritualistic calendar of the Pueblos determines with a fair degree of accuracy the time for the performance of the religious acts that occur during a series of years. Principles of geometry are empirically known and applied in the squaring of boxes by giving the diagonals equal length or by making a right angle by equally dividing the base of an isosceles triangle and connecting the center of the base with the apex. Geographical knowledge is embodied in the sailing charts of the Marshall Islanders, which mark the locations of islands, directions of the swell and of currents and cross seas, and in the charts of the Eskimo. All these illustrate the ability to learn from the observation of complex phenomena. The measuring of time and space and the art of counting indicate the beginnings of a systematization of knowledge which, however, has not led to a systematic observation of the regular connections between objective phenomena and the recognition that the objective world cannot be controlled by thoughts or acts that enable us to influence our fellow men.

Consult: Mason, O. T., *The Origins of Invention* (London 1895); Weule, K., *Die Anfänge der Naturbeherrschung*, 2 vols. (Stuttgart 1921-23); Hambruch, P., "Die Schifffahrt auf den Karolinen- und Marshall-Inseln" in *Meereskunde*, vol. vi (1912) no. 6; Goddard, P. E., *Life and Culture of the Hupa*, University of California Publications in American Archaeology and Ethnology, vol. i, no. 1 (Berkeley 1903); Boas, Franz, in Jesup North Pacific Expedition, *Publications*, vol. i-x (New York 1900-26) vol. v (1905-09) p. 410-12, and *Contributions to the Ethnology of the*

Kwakiutl, Columbia University Contributions to Anthropology (New York 1925) p. 112-19.

Religion. As we distinguish objects by size as large or small, by formal expression as beautiful or ugly, by ethical value as good or bad, without being able to draw a sharp line between the concepts of these opposites, so we distinguish between degrees of power over the outer world or of the power of the outer world over us. Ordinary ways of applying power are a matter of everyday experience. Extraordinary ways of applying power are wonderful. The emotion aroused by the latter is one of the chief elements of religious feeling. The line between the ordinary and extraordinary is indistinct. What is ordinary to one person or to one cultural group is extraordinary to another. Thus it is difficult to circumscribe the field of religion in a satisfactory way, because the same ethnic phenomena may have a religious connotation or may lack it entirely. The cure of a patient by extracting from his body the supposed cause of disease, like a piece of bone, may be a purely practical act. It may also be associated with strong emotional feelings related to an unusual heightening of the everyday powers of the practitioner. In the former case it has no religious connotation, in the latter it has. It is necessary to consider in the study of religion all activities and thoughts that are sometimes associated with the feeling of unusual power—either one's own or one that confronts one's self—even if in other cases they lack this connotation entirely. For this reason treatises on religious belief do and must include descriptions and discussions of the greatest variety of customs based on the assumption of relations which we do not recognize as founded on physical cause and effect, or on those in which physical cause and effect arouse a strong emotional attitude associated with the feeling for the existence of heightened powers. The specific character of this emotion is expressed by the attitude of man to those things which he considers sacred, as opposed to the ordinary secular life. From this point of view the religious side of ethical and aesthetic emotion will also find its proper place.

It is convenient to consider religious phenomena from two angles, as thought and action. The former gives us the general view of nature, which in a sense we might call the dogma; the latter, actions related to the dogma or those releasing religious emotion.

There are two widely distributed concepts of

power, the one anthropomorphic and clearly conceptualized, the other vague and defined with difficulty. Languages like the American Algonquin, which classify the objective world in what is human-like (i.e. animate) and what is not human-like (i.e. inanimate), give the clearest evidence of the importance of the anthropomorphic viewpoint. It may be that some of those which, like the Eskimo, do not know of any differentiation, recognize human qualities in the whole world. The interpretation of events according to subjective experience is, however, general. As we are only too apt to explain the motivation of action in our fellow men in accordance with our own mode of thinking and feeling, so primitive man, with his lack of controlled experience, explains the events of the outer world as voluntary actions which, if helpful to him, are friendly, if impeding his plans, hostile. This is not to be conceived as a rationalization but as an automatic reaction, like the unrepressed action of a person in our civilization, child or adult, who vents his spleen on an inanimate object that has been the cause of some accident. The dogmatized development of this attitude may lead to the belief that the whole world is animate, or to the belief that human-like beings inhabit all objects and that the objects obey the orders of these beings rather than that the objects themselves act. This is in part the Eskimo conception of the inanimate world. Animals, on account of the many qualities of behavior that they share with man, are most commonly considered as strictly analogous to powerful human beings.

The anthropomorphic viewpoint is conversely applied in the conceptualization of inner experiences and of the phenomena accompanying death. In some languages qualities or even habitual actions are conceptualized as objects so that they appear as nouns. It is not by any means necessary that the occurrence of such concepts should lead to an imaginative process by means of which they are given concrete form and anthropomorphic character, but it affords ready opportunity for such development. We still feel the force in the use of metaphors based on a concrete form given to a state or attribute. Hunger, courage, love, sin, consciousness, death, are, owing either to traditional usage or to poetic imagination, endowed with qualities, particularly anthropomorphic qualities, and with concrete form. Sickness is often conceived as a concrete object or a living being that enters a body and may be removed again, or as an enemy

who attacks the body and against whom man may be defended. Sins or transgressions are commonly considered as impurities that may be removed by mechanical means. The skill of a hunter may be objectivated and exist as an object or as an anthropomorphic being leading an existence independent of the hunter himself. Other qualities, particularly life, power of action, personality, are indissolubly connected with the living individual. Their conceptualization, particularly their anthropomorphic conceptualization, leads to the varying concepts of the soul. It is not rare that several of these occur at the same time, so that we have an apparent multiplicity of souls, in reality a multiplicity of different anthropomorphic aspects of life.

Since those qualities, conditions and functions which we construe under the term "soul" are conceived as substances, body and soul have separate existence and their lives are not encompassed in the same period of time. This seems to be the essence of the belief in immortality. The soul may exist before birth and continues to exist after death, for the memory of the substantiated qualities of a person does not end with his death. The intangible memory-image of the deceased arises suddenly, and vanishes again when the calls of everyday life repress imaginative thought and day dreams. It partakes of all the features of the departed and he appears in his daily garb and in his daily occupations, all of which have, therefore, continued existence. The conflicts between everyday experience and the continued existence of these images lead also to the concept of the remote country of the dead. The detailed development of all these concepts into individual systems of mythology depends largely upon specific ideas developing in a tribal unit or introduced through intertribal relations. Anthropomorphism is the expression of a lack of differentiation between the self and its sense experience.

Fundamentally distinct from anthropomorphization is the conceptualization of power as an attribute of objects. The concept is necessarily vaguer than the concrete anthropomorphization. A stone, a piece of wood or a tree is conceived as having the quality of bringing good luck or misfortune; a particular place or a particular time is endowed with "sacred" qualities; a word or a symbolic action may have the quality of power; or finally all nature may have the quality of exerting power. The awe inspired by any of these phenomena is a response to their immanent power that may have a depressing or an inspiring effect.

Such powers may also be discovered in man. The seer who discovers the future, the twin children who control the weather, the warrior who has slain an enemy, the woman during menstruation or after child birth, and the dead are endowed with powers, helpful or dangerous. Those who have helpful powers perform religious functions in the community and are intermediaries between those without powers and the anthropomorphic beings or the vague powers whom they are able to control.

Both types of reaction to the outer world occur continually side by side and independently. They flow together in so far as the quality of power is ascribed to the anthropomorphized concepts.

Only the anthropomorphic aspect of the world lends itself to the development of mythological concepts, for the human forms participate in human activities. The animals speak and act like men, the wind travels through the world, the sun is dressed in shining garments, the soul leaves the body. For this reason mythological concepts reflect necessarily the pattern of tribal life. At the same time they are transfigured by imagination, human conditions being exaggerated or a contrast being created to the conditions existing in the known world.

Many mythological concepts that are found distributed widely all over the world may be the immediate outflow of the anthropomorphic viewpoint. This seems particularly true in connection with the conceptualization of the soul, of animals as human beings, perhaps also in the readiness with which active natural forces, like sun, wind and thunderstorms, or everchanging natural forms, like the moon, are given human forms; but mythological concepts are so varied and they are so readily influenced by imaginative suggestion that their actual development in each locality can be understood only by an analysis of their complex growth, due in part to the ever changing formulations given by imaginative minds in the course of generations, and in part to suggestions that come from the outside through cultural contact.

The mythological tales attached to the anthropomorphic characters are even more involved in their origins. All these tales, when stripped of their mythological trappings, are clearly human, novelistic tales. It is often assumed that these tales are an expression of the naive contemplation of natural phenomena. Their distribution and the variety of mythological purposes served by the same tale suggest that ordinarily the

reverse process has occurred. The anthropomorphic characters seem to have fitted a pre-existing tale or to have suited peculiar human situations that are often the topic of conversation. These were transferred to the mythologic characters. There is ample evidence of the wide diffusion of tales and of the variety of their mythological applications.

Most mythologies attempt to account for the beginnings of things, for the origin of human inventions and for the regulations controlling life. The mythological imagination relating to origins is always satisfied with the existence of things as they are now in another concrete or conceptual world, from which they are brought into the world of man piecemeal or altogether; from a concrete world by heroic or crafty visitors, from a conceptual world through projection into objective existence by a creative will power, as in Semitic mythology; or by actual manufacture according to the preexisting idea. In some cases the beginnings of our era are marked not only by the beginnings of those conditions that make life possible but also by the introduction of the difficulties that beset human life, while the previous period did not know hunger, sickness and death. The correlated idea of an end of our period with recurrence of desired conditions is not so frequent.

While the vague concept of power as an attribute has not the necessary definiteness to lead to the formation of myths, it occurs constantly as an important element of mythical tales, just as it appears in human life: the mysterious qualities of space, exemplified by the contrast between inland and sea, mountains and plains, or between the cardinal points; of time as shown by the power or sacredness of certain hours or days, of the solstices, midnight or new moon; of numbers, as in the formal number of repetitions of an action, of the success of the third brother, of the fifth son or of the fourth attempt to reach a goal. In many of these cases the purely aesthetic pleasure in repetition may be felt as no less important than the mystic relations of space, time and number.

The forms of religious activities and those of religious concepts are interrelated. An extended group of religious activities serves the purpose of obtaining success in undertakings; in other words, they are designed to obtain the fulfillment of wishes. Magical acts are performed to control immanent powers of objects or of mythical beings. In the performance of a process resides the power to have the same process re-

peated in another desired place or on another object. This is magic by analogy. To dissolve the clay figure of an enemy in running water causes the enemy to waste away. The symbolic act by means of which an end is to be attained varies in character among different tribes and according to the ends to be attained. Fertility of plants or animals is promoted by sexual symbolism, rain and wind by symbolic, imitative actions. An object and all its parts are felt to be so intimately related that an action affecting the part will affect the whole. Particularly the human body is so keenly felt to be one with the hair, nails and excretions, with objects that have absorbed some of the exhalation or perspiration, that their maltreatment will immediately affect the body itself. Whatever is done to the part affects the whole. A spell can coerce anthropomorphic beings on account of its inherent power. The action of amulets is based on their qualities that exert a control over other qualities or anthropomorphic beings. An amulet makes it permissible to visit uncanny places and protects against the attack of spirits. On the other hand unlucky objects may thwart favorable influences.

Generally all kinds of power, conceived as qualities or in anthropomorphic form, are unable to overcome the defiling influences of the unclean, particularly of mourners and menstruating women, sometimes also of a murderer or of a warrior who has killed an enemy. Hostile powers may be overcome by magical acts.

It depends entirely upon the attitude of the performer of a magical act or of the wearer of an amulet whether his behavior is individually of a religious character or whether he looks upon it unemotionally purely as a relation of cause and effect, from his point of view as a practical or scientific process. When accompanied by the emotional state induced by the awe, respect, or feeling of sacredness of the qualities utilized, it is religious.

The devices used for influencing anthropomorphic beings are naturally parallel to behavior by which human beings are influenced: to entreaty, presents or compulsion. These devices applied to anthropomorphic beings are prayer, sacrifice and compelling spell. Formality of prayer and sacrifice are often necessary because their power is believed to be immanent not in the act as such but in its form. The stronger this concept, the more rigidly controlled is ritualistic behavior. Ritualistic accuracy of behavior is sometimes insisted on because of the inherent power of the precise

action; at other times it is interpreted as a requirement imposed by anthropomorphic powers. Simple forms of ritual are merely an expression of custom, like tabus or forms adhered to in gatherings. In most of these the religious explanation is due to rationalization of a prevailing custom, although the rationalization may produce new parallel customs. Examples of such rationalized customs are the food tabus. Some South African tribes observe food tabus, because the eating of the forbidden fruit would cause the teeth to drop out prematurely. There is no reference to a supernatural being. The Eskimos must observe their tabus because the concretely conceived transgression fastens itself to the hair of the anthropomorphic giver of food animals, annoys her and causes her to withhold the food supply.

Many ritualistic acts designed to increase the power of the performer require a heightened emotional state. When power is to be obtained from anthropomorphic beings, their grace is secured by rigorous purification, fasting, dancing and, in some cases, by self-torture. These may lead to a trance in which the desired power-bestowing vision is secured. The person who seeks a vision and the practising shaman work themselves up into a state of high excitement. Other ritualistic acts are perfunctory and lack the emotional connotation. Of this character are most of the tabus and proscriptions which are automatically repeated day by day: small, regular sacrifices and prayers and the like. The greater the formalism, the less the accompanying religious excitement.

Rituals are apt to increase in complexity, the larger the number of participants and the stronger their differentiation in regard to specific powers. Their specific forms depend not so much on religious concepts as on their relation to social forms and aesthetic impulses.

The terms animism, mana and other related ones have been avoided here, because their present use seems to obscure the essential point, the difference between the approach to the "supernatural" from the viewpoints of power conceived as anthropomorphic and of power conceived as an inherent quality of objects.

Consult: Spencer, Herbert, *Principles of Sociology*, 3 vols. (London 1876-96; vol. 1, 3rd ed. 1885); Tylor, E. B., *Primitive Culture* (7th ed. New York 1924); Lowie, R. H., *Primitive Religion* (New York 1924); Sneath, E. H., *Religion and the Future Life* (New York 1922); Otto, Rudolf, *Das Heilige* (9th ed. Breslau 1922), tr. by J. W. Harvey as *The Idea of the Holy* (London 1923); Söderblom, Nathan, *Das Werden des Gottes-*

glaubens (Leipsic 1916); Hauer, J. W., *Die Religionen*, vol. 1- (Stuttgart 1923-); Marett, R. R., *The Threshold of Religion* (2nd ed. London 1914); Durkheim, E., *Les formes élémentaires de la vie religieuse* (Paris 1912), tr. by J. W. Swain (London 1915).

Ethics. The impression given by the moral behavior of man in different cultures is that of a great variety of standards. The slight valuation of human life, anthropophagy, slavery, torture of captives, suicide, looseness of sexual relations, represent attitudes that seem fundamentally different from our own standards. Notwithstanding these differences in behavior the ethical motivation does not show analogous differences. A sharp distinction is always drawn between the members of the social group and outsiders. The standard of ethical behavior toward members of one's own group is regulated by subordination of the individual to group interests and by recognition of the rights of other members of the group. Mutual helpfulness in the group is demanded; inordinate egotism that overrides the interests of fellow members is resented. The Eskimo shares his game with unsuccessful hunters, the clan of Alaska Indians supports one of its members in his undertakings by gifts or loans of valuables. Property rights in the community are respected. General subordination under the rules which keep the society going is expected. These rules are not binding outside of the closed social unit. Behavior toward the alien depends upon the form of this concept. In most primitive societies the very fact that only members of one's own group are designated as human beings indicates that, at one time at least, a specific difference was felt to exist between them and aliens. With increasing recognition of the similarity of interests between aliens and group-fellows, the utter disregard of the interests of the former has been weakened, although the feeling of difference is an active force even up to the present time.

The social obligations that develop in intimate family life, particularly the instinctive relations between mothers and helpless children, not always only their own, may be observed everywhere. When the social customs interfere with them, as occurs in numerous cases, ethical conflicts arise.

In primitive society the standard of behavior is fixed by a common culture. As in the Homeric *epos* the relations of man and the gods were recognized beyond the possibility of a doubt and the ethics of behavior were regulated according

to a well integrated culture, so it is in primitive society, which does not favor individual freedom of thought. The individual does not seek an ideal, it is given to him. Pressure in regard to conformity in belief is very rare, but individual actions contrary to custom are so often conceived as detrimental to the common weal that they are resented and suppressed.

The most serious offenses within the social group are murder and bodily harm; infraction of property rights, including adultery; witchcraft and transgression of tabus or other regulations that concern the whole community. In cases of individual or group conflict retaliation is felt as an ethical duty. In some cases the feeling of respect for the rights of fellow members turns into jealous envy of every person who is in any way prominent, by wealth, wisdom or skill. This is a characteristic feature, for instance, of African society.

Consult: Westermarck, E. A., *The Origin and Development of the Moral Ideas*, 2 vols. (2nd ed. London 1912-17); Sutherland, A., *The Origin and Growth of the Moral Instinct*, 2 vols. (London 1898); Hobhouse, L. T., *Morals in Evolution* (3rd ed. London 1915).

THE INTEGRATION OF CULTURE. All the various aspects of human life: bodily form, language, culture, as well as the environment in which man is placed, are interrelated, and the form of culture is a result of this integration. In many aspects of culture the mutual influences are strong, in others weak.

Race and culture. No adequate proof has ever been given showing that the different behavior of racial groups is organically determined. The wide range of differences between individuals and family lines constituting a local race, and the occurrence of identical types in related races, have been pointed out before (p. 75). It has also been stated that this overlapping of forms is much more far reaching in physiological and mental functioning than in anatomical form. The apparent differences in mental reaction of races obtained by students of experimental psychology may be ascribed as well to differences in upbringing and in cultural experience as to differences in anatomical structure. The differences in results of tests taken on people of the same descent, but living in different environment, seem to prove the importance of environmental as against organic determination. In groups as much alike as the various types of Europe no anatomical difference can be found that would explain the varying behavior of

different social or local groups. The achievements of different races have been adduced as proof of organic differences. The primitive culture of the Australians, contrasted with the high civilization of Europe, is taken as proof of the lower mental status of the Australian. While it is not possible to disprove the argument in this case, it is certainly not applicable in a comparison of north Europeans, central Europeans, south Europeans, Mongols and Malays. In these cases the historic conditions are so different, the organic basis of mental life so similar, that it seems arbitrary to explain differences as due to biological factors. It is possible that the frequency of creative genius may not be the same in all races and that slight differences in the distribution of various forms of functioning occur, but it cannot be shown that any of the existing races is, on account of its hereditary character, unable to participate in any one of the existing civilizations.

Consult: Gobineau, Arthur de, *Essai sur l'inégalité des races humaines*, 2 vols. (2nd ed. Paris 1884), bk. i tr. by Adrian Collins (London 1915). A general survey of the literature relating to mental differences of races has been given by Theophile Simar, *Étude critique sur la formation de la doctrine des races au XVIII^e siècle et son expansion au XIX^e siècle* (Brussels 1922). Unfortunately the author does not discriminate clearly between the theory of racial and cultural characteristics, so that many of his statements are misleading. Among representatives of the theory of lack of correlation between racial descent and cultural life may be mentioned Hertz, Friedrich, *Rasse und Kultur* (3rd ed. Leipsic 1925), tr. by A. S. Levetus and W. Entz (London 1928); Zollschan, I., *Das Rassenproblem* (3rd ed. Vienna 1912); Boas, F., *The Mind of Primitive Man* (New York 1911), and *Anthropology and Modern Life* (New York 1928); Lowie, R. H., *Culture and Ethnology* (New York 1917). A medial position is taken by Hanks, Frank H., *The Racial Basis of Civilization* (New York 1926).

Environment and Culture. Attempts have been made to explain the whole cultural complex as due to environmental influences. This is not possible. In every society the elements that influence the actual course of cultural change are many and varied. We may expect to find an influence of environment upon culture, but the fact that a variety of cultural forms occurs at various periods in the same environment is sufficient indication that the environment alone does not determine specific cultural forms. The American Indian who did not know the use of iron and coal was influenced by his environment differently from his European successor. Increased knowledge changes the relation of man

to his environment. Before horses were introduced, the western prairies played one part in the life of the Indian. After the introduction of horses they played another part, and after the disappearance of the buffalo and the introduction of cattle, still another. Their introduction was determined by historical happenings that had no relation to the environment, but that changed the environment itself. Environment modifies culture, and culture modifies certain aspects of the environment. The limiting effects of environment are clear. The absence of vegetable products limits the culture of the Eskimo, the absence of snow that of the inhabitants of Central Africa. Absence of wood on the steppes, of stone on atoll isians, of fish in the desert are all limiting factors. On the other hand geographical conditions are a creative factor to a very slight degree only. Fertility of the soil does not produce agriculture. It helps in the development of agriculture where the art is known. The presence of large herds of reindeer has not created domestication in America, although Siberian tribes living in an analogous environment have domesticated the reindeer. The presence of iron ores in America has not developed American metallurgy, although in Africa the ores are utilized. The influence of environment is confined to modifications brought about in pre-existing cultural forms. The direction which the stimulus takes depends upon cultural factors. The hard snow of the Arctic enabled the Eskimo, but not other Arctic tribes, to invent the vaulted snow hut. The occurrence of clay does not everywhere lead to the development of pottery. When it does occur, the excellence of the technique is not dependent upon the abundance and quality of material but upon the general economic demands and the technical and artistic activities of the people. Given a certain type of culture, the effects of environment may be traced in many important aspects of life, but only in this sense can environment be considered as a determinant. The periodicity of the seasons, the habits of animals, the general configuration of the country all exert their influences. Periods of activity and of leisure, the location of villages, movements of the tribe from one locality to another, the forms of means of transportation and the limits of political units are so affected. Thus the seasonal ripening of fruits followed by periods in which vegetable food supply is not available and the annual movements of spawning fish followed by periods in which the supply of fish is inadequate determine the habits of

people dependent upon fruits and fish. The position of villages near streams that abound in fish or on the seacoast; the periodic migrations of tribes that hunt migratory game; the use of the sledge and snowshoe in snow covered countries; the political isolation of communities in secluded valleys, are determined or at least favored by local conditions. The food supply also controls the size of communities that do not import food products and thus exerts an indirect influence over social and political organization. The experiences with which the imagination of the people occupies itself are furnished by the environment in which they live. Hence their traditional tales, their metaphorical expressions and even their religious beliefs require, for a full understanding, a knowledge of the influence of environment upon a preexisting culture and of its importance as furnishing much of the available sense experience.

No less effective is the geographical position of a people that makes possible or hinders cultural contact and the dissemination of ideas and inventions. Attention has also been directed to the stimulating or enervating effect of climate upon the individual, but no direct relation between these conditions and the development of early culture has been proved to exist. Analogous cultural forms exist or existed in tropical Africa and in temperate North America, and advanced cultures flourished in India and in Europe.

Consult: Ratzel, F., *Anthropogeographie*, 2 vols. (2nd ed. Stuttgart 1899-1912); Semple, E. C., *Influences of Geographic Environment* (New York 1911); Vidal de la Blache, P. M. J., *Principes de géographie humaine* (Paris 1922), tr. by M. T. Bingham (New York 1926); Huntington, Ellsworth, *Civilization and Climate* (3rd ed. New York 1924).

Population. The density of population is determined both by cultural achievements and by environment. A population that is entirely self-sustaining, that does not receive food supplies from the outside, is limited by the food supply that can be secured from its habitat. An Eskimo tribe that relies upon sea hunting, or a Californian tribe that lives on acorns, cannot increase permanently beyond the limit that can be sustained in the most unfavorable years. These limits are higher where agriculture or herding occur. When the food supply is ample, the density of a population may increase, provided there are no other checks, like war, infanticide or disease. If at the same time the food supply is seasonal or so easily secured that time for

leisure remains, the total number of individuals who can devote their time to occupations other than the mere obtaining of food and shelter increases, and opportunities for the development of new cultural achievements are given. In general a correlation between density of population and diversity of cultural traits may be observed. Political organization depends upon the size of social units and upon the density of population.

It is possible that the natural limitations of population may have contributed to devices for an artificial retardation of the natural increase, by infanticide, abortion and restrictions of sexual intercourse, although it does not seem likely that these are primary causes.

Consult: Ratzel, F., *Anthropogeographie*, 2 vols. (2nd ed. Stuttgart 1899-1912) vol. ii, p. 95-256; Carr-Saunders, A. M., *The Population Problem* (Oxford 1922).

Language and Culture. The interrelations between language and culture have been touched upon before (p. 78). So far as inventions, institutions, art and religion go, they are not far reaching. Their importance lies in the influence of language upon speculative thought, upon directions followed in attempts to give explanations for customs; still more in the emotional value of words that serve as symbols, like those for supernatural power or sacred objects and acts. This, however, is not a specific characteristic of language. It is common to all symbols.

Interrelations between Other Cultural Phenomena. The relations between geographical environment and fundamental economic conditions are close, and in most cases the environment acts through the intermediary of economic conditions. These, being a part of culture, are much more closely related to other manifestations of cultural life than environment. The occupations by means of which man obtains food and shelter determine the directions in which his discoveries and inventions develop. The sea-hunting Eskimo has developed his boats and weapons because his whole life is based on the procuring of sea mammals for food and for heat; not that the specific forms are determined by the economic occupation, but the concentration of attention upon this occupation gives the opportunity for new achievements. The cattle breeder and agriculturists acquire their experiences and make their technical inventions in those domains of human activity upon which their attention is concentrated.

The amount of leisure depends upon economic conditions. The more easily food and shelter are secured, the more ready is man to devote his time to play with hands, tools and mind. The complexity of cultural activities increases, therefore, with favorable economic conditions.

While it cannot be maintained that social forms are determined by economic conditions, the two aspects of cultural life are indissolubly related. In a region of ample food supply in which the maintenance of life depends solely upon physical skill and in which a sparse population allows everyone to find a productive hunting ground, a differentiation according to rank or wealth is not likely to occur, except in so far as orphans, widows and old people may be thrown upon the mercy of their friends and relatives. When the produce of the country does not allow all to share equally, when specially favored spots are claimed as property, the equality is disturbed and economic and social differentiations are found. Thus the development of property concepts, the organization of the family and of occupations, the occurrence of societies with social or religious functions, are all intimately related to economic conditions. The forms of organization cannot be explained as due to economic necessity, but their development may be favored or hindered by economic needs, while they themselves always influence economic life. Thus property in land may be vested in the whole community. Among hunters and food gatherers all may have equal rights; or the labor bestowed upon a particular locality—like the building of traps, burning over of ground or tilling the soil—may give to an individual or to a group a temporary or permanent right to the use of a particular piece of land. The property rights in these cases depend upon the constitution of the cooperative unit, whether a single person, a family, a sib or a society. In extreme cases, as in some African tribes, all property in land may be vested in a single ruler.

Whenever the transfer of property involves future obligations on the part of the recipient, the transaction is public and gives opportunity to the development of ritualistic behavior. African marriages, the potlatch of northwest America and the elaborate Kula Ring of the Trobriands are examples.

Intertribal relations are strongly influenced by economic considerations. It has been pointed out that war is often a means to the acquisition of necessary or desired property. Peaceful contact

is commonly based on mutual economic interest, on the regulated exchange of produce which may lead to the establishment of regular markets, as in Africa or on the islands in Bering Strait where Asiatic and American tribes meet for barter.

The assumption made by Lewis Morgan and his followers of a close correlation between forms of family organization and other cultural traits is not borne out by the fuller data that are now available. We find the small bilateral family among the Eskimos, unusual complexity of the tribal organization among the Australians. In North America the division of the tribe in a few exogamic sibs is rather characteristic of the agricultural tribes, bilateral families are characteristic of many hunting and fishing tribes.

The terminology of blood relationship and of affinity is only to a small extent an expression of biological relations. It is primarily an expression of social relations. Assuming exogamy as an exceedingly ancient institution, as indicated by its universality, the extension of terms of the incest group beyond the small family will exert an influence over the development of sibs, as indicated before (p. 86). The mutual influence between the early terms of relationship and their application to wider circles may have established larger exogamic groupings and these in turn may have stabilized the linguistic categories.

A close connection may be traced between organization on occupational and political lines and technical progress. The greater the variety of technical processes and the more complex the technique, the more developed is social specialization, as among the Africans where the trade of the blacksmith is often carried on by a separate social class; or in Samoa, where the carpenters are a group by themselves. Specialization in technical pursuits of the two sexes or of individuals of special skill is universal. In the latter group those who are believed to be possessed of supernatural powers form a distinct class. Political organization depends in part upon the type of activity of the tribe, in part upon the size of the population. Recognized leaders who wield authority are found wherever communal undertakings occur that demand leadership for their success. The closer the contact between individuals and families whose interests are liable to come into conflict, the more frequently do we find more elaborate political organization. Its form is not determined by these conditions but by historical relations or other particular conditions.

Religious beliefs pervade the whole domain of cultural life, for technical, economic, legal, social and artistic manifestations are filled with beliefs and actions that have a religious background. Since the success of every action depends upon skill, upon the power of adequate performance, it may be thwarted by hostile or helped by friendly powers. The relation of man to the supernatural pervades, therefore, his whole life. Technical and economic activities are often accompanied by prayers and tabus; and everything pertaining to social organization is sanctified. Customary law is largely occupied with the observances of religious proscriptions.

More essential than these interrelations between various aspects of culture is the unification of culture according to definite patterns. In a number of primitive cultures occur fundamental attitudes that dominate the thoughts and behavior of the society. Thus the Indians of the northwest coast of America are entirely dominated by the desire for rank and social prestige to be attained by lavish distribution of wealth. All the actions of men and women, from childhood on, are dominated by this thought. The methods of social preferment are fixed and may be observed in the procedures connected with social gatherings, shamanism, ceremonies and war. Many Melanesians seem to be under the sway of a similar pattern, in which, however, display of property is more important than distribution. The Indians of the plains are dominated by the idea of advancement of social standing by means of warlike exploits and military glory of a set type, with emphasis upon personal bravery. Their feeling for military prowess as a dominant characteristic of their lives is entirely distinct from that of the headhunting Dyak. In contradistinction to these types of culture that stress social standing, Dr. Bunzel describes the life of the Zuni, Dr. Mead that of the Samoan, who strive to merge individuality in the mass. Dr. Benedict has described in a most instructive manner the distinction between the "Dionysian" orgiastic pattern of the lives of most Indians and the "Apollonian" formal pattern of the Pueblos. In many cases the general cultural pattern is weak and the culture seems to us thin. Nevertheless the strong influence of patterns of thought or behavior may be felt, even in these cases, in more limited aspects of culture. An example is the art style to which every newly invented pattern conforms. The pronounced styles of New Zealand, those of the tribes of the Amazon region, of the basketry of the Indians of

various parts of California or the local character of mythology and folklore are of this kind. The strong influence of the pattern appears also in social organization and religious ritual. When one section of a tribe is designated by a name, all have names; when one believes in a totemic ancestor or protector, all have this belief; if tabus are proscribed for sibs, they are likely to be proscribed for other types of social groupings.

The integration of culture here discussed is not identical with the correlations established by early investigators, like Lewis H. Morgan. It is also distinct from those correlations between language, economic life, social organization and religion which W. Schmidt and W. Koppers derive from a comparative study of cultures. Notwithstanding their attempt to reach historical results by an analysis of cultures based on the occurrences of numerous analogous phenomena, they end with an evolutionary series in which many aspects of culture appear firmly associated on each developmental stage.

Consult: Schmidt, W., and Koppers, W., "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912-24) vol. iii, pt. i; Schmidt, W., "Die Genitivstellung in den nord- und mittel-amerikanischen Sprachen" in International Congress of Americanists, 21st congress, *Proceedings*, pt. i (The Hague 1924) p. 287-304, and "Zur Genitivstellung als Ausdruck der geistigen Einstellung" in Anthropologische Gesellschaft in Wien, *Mitteilungen*, vol. lviii (1928) 234-36.

Education. Children grow into the integrated culture largely by imitation. Their play is based on imitation of the activities of their elders and they participate at an early age, at least partially, in many of the industrial and social activities of the community. Formal education does not occupy much time, but it is not lacking. Behavior according to tribal standards is rigorously exacted and breaches are not passed over lightly. The breach of an important tabu, like intrusion into a secret religious society, may even be punished by death, however innocently committed. All this does not make the development of unruly gangs impossible. They may even be encouraged as a means of developing a domineering and warlike spirit. As soon as children are capable of taking part in the industrial activities of the tribe, they are expected to do so. Girls take charge of their younger brothers and sisters, assist in household duties, and learn the industries carried on by women. Boys participate in the work of the men. At the

same time moral instruction is given directly, by explaining those types of behavior that are considered right, respectful behavior before elders and supernatural beings, or arrogance toward inferior classes; the proprieties of behavior in everyday life; liberality or parsimony; craftiness or truthfulness. Often the moral teaching is attached to an entertaining tale which may be pointed toward a moral, or may be merely illustrative. An important part of the education of the young is connected with ceremonies of initiation, for in many cases the secret beliefs and rites are divulged to them at this time. The rites also impose severe hardships upon the young. They develop and test their endurance. The function of most of these rites is to make the young full participants in tribal life. The corresponding ceremonies through which the girl has to pass are generally less educative, but hinge upon the magic power of the first menstruation. Still the educative features are not absent. A special feature of the adolescent rites of boys and girls is the preparation for special activities. A boy may strive for means that make him a successful gambler, shaman or warrior; a girl for skill in an industry or in her home work. Sometimes skill in special activities is secured in childhood. The Eskimo shaman may impart power to a child by holding it in his lap. In New Caledonia the navel string cut on a hard stone makes the child hard like a stone in battle; in Vancouver Island, when fastened to the baton of a good singer, it makes the child a good singer.

Consult: Hambly, W. D., *Origins of Education among Primitive Peoples* (London 1926).

THE STUDY OF CULTURES.—*Evolution and Progress.* The early anthropologists, like Spencer, Tylor, Morgan and Lubbock, who developed their theories under the stimulus of Darwinian evolution, observed correctly the increasing complexity of cultural forms, the progress of knowledge and the elimination of antiquated forms. On this basis the theory of the evolution of culture appeared to them as a continuous process. They erred in assuming a single unilinear evolution which may be discovered by means of the study of examples collected at random from all parts of the world. To give one instance, both Tylor and Spencer, each from a single fundamental idea, tried to develop the whole religious structure, although Tylor at least recognized diversification in later development. It is the picture of biological

development in which diverse life forms spring from the same source. Extreme evolutionists even assumed a unilinear development according to which every existing primitive and advanced culture may be given its proper place in a single ascending line. At present we recognize that cultural phenomena rarely have a single source. Economic life has two fundamentally distinct sources in the occupations of man and woman, from the combination of which agriculture, with the help of domesticated animals, later develops; the graphic and plastic arts develop from virtuosity in technique and from attempted representations which flow together and determine the later course of art; in religion are found the two fundamental ideas of power as an attribute of objects and as one of anthropomorphic beings. Besides this, in the further course of historic development, contact with foreign tribes plays an important part, so that the general picture is one of culture arising from multiple sources that unite, branch out and flow together among themselves and with remote lines.

While the general evolutionary scheme is no longer tenable, the problem of progress remains. Observation proves that the inventions and knowledge of man have extended with ever increasing rapidity, and it is possible to speak of progress in technique, in successful exploitation of natural resources and in knowledge, for every step taken is an addition to previous knowledge. Cases of loss of previous knowledge are comparatively rare and, for mankind as a whole, temporary. It is much more difficult to speak of progress in any other cultural activity, except in so far as those aspects of cultural life that contradict the advances of knowledge gradually disappear. The lack of change in fundamental ethical attitudes has been mentioned (p. 97). Progress in social organization refers generally to a better adaptation to economic conditions and ethical requirements as understood according to the general state of knowledge.

Diffusion and Independent Origin. Discussion of the problem of independent origin or diffusion of cultural traits has played an important part in the history of anthropology. The significance of diffusion is now generally recognized, abundant proof being available through the evidence of prehistoric archaeology, of early history and of the distribution of cultural phenomena. The gradual spread of bronze and iron in Europe, the evidence of mutual in-

fluences between Europe, Central Asia and the Far East, the distribution of inventions relating to navigation among the tribes of the Indian and Pacific Oceans, the distribution of Indian corn and its cultivation in the two Americas, are cases in point. There is, however, still much uncertainty in regard to the degree of similarity that constitutes proof of historical identity, and also in regard to the interpretations of locally isolated phenomena for which no historical contact seems likely. Some investigators claim for these independent origin, others historic connection. In many cases conclusive proof seems impossible. A detailed study of continuous distributions gives fairly certain results in regard to late contacts, while in many cases the direction of diffusion is determined with difficulty. Thus the interpretation of the history of the megalithic structures of western Europe depends upon an answer to the question whether they are imperfect forms suggested by a knowledge of Aegean structures or whether the latter are an elaboration of the cruder forms. In a case of this kind prehistoric archaeology may give an ultimate answer, while in the distribution of an art, custom or belief that extends fairly evenly over a wide area, but in varying perfection, a categorical answer based on distribution alone cannot be given. Neither is it possible to claim that the region of the fullest development of a cultural form must be its original home. As animal forms have become extinct in a district where they first appeared and flourish now in other continents, so cultural forms may originate in one area, become extinct and live in a remote district. Only in cases of the occurrence of easily recognized fragments of a cultural trait in discontinuous spots adjoining an area of its continuous distribution may we conclude with some certainty that it is recently introduced. A chronology based on distribution alone will always be full of uncertainties.

Inferences regarding early diffusion must be based on our experience in regard to stability of customs. The assumption of stability extending over exceedingly long periods is the fundamental basis of the *Kulturkreise* constructed by Frobenius, Graebner and Pater Schmidt. The basis of their argument is that wherever a sufficient number of independent analogous forms are found in remote areas, these are definite proof of an early historic connection. When in this manner the disconnected, surviving traits of one of the original culture forms have been isolated, the inference is drawn that all mixed

forms are more recent. The original forms are furthermore assumed to be those that are farthest removed from the original home of man—in South Africa, Australia and South America—and on this basis a time sequence is determined. While we must accept the methodological viewpoint, namely that wherever a sufficient number (quantity) of entirely independent elements of identical form occur, these are likely to be of common historical origin, nevertheless the proof of the permanence of the features compared has not been given. Observations on modern primitive cultures show that cultural traits which according to this theory are assumed to have remained stable since earliest times are undergoing constant changes. Neither inventions nor practises nor ideas remain stable under changing environmental or historical conditions. The theory would have to be substantiated by proof showing that those features for which great antiquity is claimed remain stable under varying conditions and over long periods. Stress is laid, for instance, on the square or round forms of houses. The American Athapascans have not retained their house forms, but these vary from square wooden structures to conical tents. In Polynesia, notwithstanding analogy in structure, the Samoans have round or elliptical houses, while house types of most of the other island groups are square. The social organization of tribes is not stable, but undergoes changes—often rapid changes. This is proved by the diversity of systems of relationship in closely related tribes and by such changes as are evidenced by the present status of the Bella Coola and Kwakiutl of the north Pacific coast of America, or by the contrast between the cattle breeding Bantu of east Africa and those of west Africa who lack cattle.

The theory minimizes the possibility of the independent origin of similar ideas. Graebner, with whose name the theory is particularly associated, denies its existence. A few entirely isolated occurrences seem convincing: the looking glass of obsidian of the Romans and of British Columbia and Mexico; the paddle with swallow-tail point on the coast of Oregon and on the lakes of Mecklenburg in Germany; the enema, by means of a tube with mouth piece, of the Bella Coola and of modern times; the scales of ancient Peru and of the Old World; sun dried bricks in the Orient and in America; the writing of numbers, by giving values to each unit according to its position, in Yucatan and in our method of writing; the small arrows used for

bleeding in Africa and in Asia. It is difficult to give historically valid examples of the independent development of inventions, because our civilization has been for a long time richer than that of primitive people and because the popular knowledge of elements on which new inventions are based is not well known. Thus the safety pin seems to have been reinvented after it had been in general use during the bronze period. Still it is mentioned in Germany by Hans Sachs in 1568. The jew's harp was recorded as a new invention in 1673, although there is evidence that it was known in 1535. The winding of twine in Polynesian fashion was reinvented in New York, but a patent was denied on account of the use of the method by the Polynesians. The history of invention and discoveries proves that in a given stage of culture analogous discoveries are bound to occur. This should apply also to primitive people who live under similar conditions and who are confronted by similar problems.

There is also lacking a clear definition of identity. A careful analytical study would justify the rejection of many assumed identities. The development of square and round houses does not need to have followed the same course everywhere. The invention of boards and their use for house building necessitates angular structures. The use of two parallel inclined wind sheds also leads to the construction of angular houses. Totemism is not by any means the same everywhere, either in character or in origin. Australian and American totemism are analogous neither in form nor in concept. In small tribes two class systems may develop through a reduction of multiple divisions. Others are based on the dual organization required in games in which the whole tribe participates and which may have entered deeply into the social structure, or upon the contrast between peace and war functions, between the sacred and the secular. These forms vary so much that comparability must be proved in every case. Shamanism is a generalized term which includes many different concepts of the relation between the shaman and the supernatural world.

Cultural activities in adjoining territories are often similar in form, but differ in their significance. In North America the uniformity of the art of the prairie tribes and its individuality when compared with the art of other districts prove a common historic origin. Nevertheless the types of symbolic meaning given to the same forms are strongly differentiated. The ritual of

the sun dance is essentially the same, but not its meaning. In the explanatory or ritualistic use of the same mythological notion each tribe shows its individuality. Similar observations have been made in regard to the culture of Polynesia, where similar objective features have been retained in distant islands, although their social connotation is not the same. This is true, for instance, in all that pertains to canoe building. It may be inferred from these and other similar observations that, on the one hand, actions are more stable than their significance; on the other hand, that it is easier to adopt a new mode of action than a new system of thought. As among ourselves, a certain institution or other form of behavior may continue for a long time while with changing culture its meaning changes; on the other hand, foreign forms may be copied but filled with a meaning that conforms to the mental habits of the society that adopts it. The explanation of a custom given by a people at any given time must always be considered primarily a psychological one. It is very rare that the psychological explanation actually coincides with the historical development of the custom. All these considerations stand in the way of the acceptance of the *Kulturkreis* theory, which is based on the assumption of the permanence of correlations of supposedly identical cultural traits, the identity of which has not been safely established and which in modern primitive cultures prove to be unstable.

Consult: Ankermann, B., "Kulturkreise und Kulturschichten in Afrika" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 54-90; Frobenius, Leo, *Ursprung der Kultur* (Berlin 1898); Graebner, F., *Methode der Ethnologie* (Heidelberg 1911), and "Die melanesische Bogenkultur und ihre Verwandten" in *Anthropos*, vol. iv (1909) 726-80, 998-1032, and "Kulturkreise und Kulturschichten in Ozeanica" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 28-53; Schmidt, W., "Kulturkreise und Kulturschichten in Südamerika" in *Zeitschrift für Ethnologie*, vol. xlv (1913) 1014-1124; Schmidt, W., and Koppers, W., "Gesellschaft und Wirtschaft der Völker" in Obermaier, H., and others, *Der Mensch aller Zeiten*, 3 vols. (Berlin 1912-24) vol. iii, pt. i; Rivers, W. H. R., *The History of Melanesian Society*, 2 vols. (Cambridge, Eng. 1914). I have not entered here upon a discussion of the views of G. Elliot Smith (see his "Primitive Man" in *British Academy, Proceedings*, vol. vii, 1915-16, 455-504, and *Migrations of Early Culture*, 2nd ed. Manchester 1929; and *Ancient Egyptians and the Origin of Civilization*, new ed. London 1923; also Perry, W. J., *The Megalithic Culture of Indonesia*, Manchester 1918, and *The Children of the Sun*, London 1923) because the basis of his hypothesis of a pan-Egyptian origin of all cultures is contradicted by all we know about primitive culture.

Culture Areas. The concept of culture areas has been developed as a device for describing the typical common characteristics of culturally related tribes. Such groups are generally found in contiguous areas, although they may also be scattered and interspersed among other cultures, like the Pygmies of Africa or the Pueblos of New Mexico and Arizona. The necessity of such a grouping develops from the bewildering variety of individual cultural forms that fill the continents. It originated in the needs of museum administration and found its first expression in the system of cataloguing introduced by Adolf Bastian in the Ethnographical Museum at Berlin. Ratzel in his *History of Mankind* based his descriptions on this device, and Clark Wissler employed it in his description of the North American Indian. Like every other classificatory device built on a selection of typical traits, the concept of culture areas contains a strong subjective element and varies according to the stress laid upon one or the other traits of culture. To those who see the principal trait of culture in economic conditions and inventions and to those who lay particular stress on psychological attitudes, folkloristic material or social organization, the culture areas will not be the same. To those who have a keen feeling for the varying associations between such elements or who stress more minute differences, large culture areas appear too generalized. The assumption that the generalized characteristics of the culture area are present in any one of the constituent social groups may give an entirely erroneous picture of the integration of cultural values in a particular tribe. Thus the classification of the agricultural tribes east of the Mississippi valley, of the western prairie tribes and of the plateau tribes who were fishermen and buffalo hunters, each into one group in which all their cultural manifestations are thrown together, would give a warped picture of the individualities of their cultural types, although it is a convenience in visualizing certain aspects of their lives. This difficulty is also manifested in the concept of marginal areas which is a necessary complement to that of culture areas, because in intermediate districts the selected typical forms lose their prominence. The marginal cultures are no less complete in themselves than the typical ones, although they do not find an adequate place in the scheme of culture areas. In exceptional cases important contrasts may be found that set off one culture against another, such as Eskimo and Indian, Pueblo and nomadic Athapascan.

Pygmy and Bantu, but much more commonly transitional forms are found. The description of a typical tribe gives a safer insight into an integrated culture than the description of a culture area. On the other hand an analysis of culture areas as defined from various points of view, material culture, social organization and beliefs, gives us an insight into the conditions that helped to shape each individual culture.

Consult: Wissler, Clark, *The American Indian* (2nd ed. New York 1922); Herskovits, M. J., *The Cattle Complex in East Africa* (Menasha, Wis. 1926); Ankermann, B., "Kulturkreise und Kulturschichten in Afrika" in *Zeitschrift für Ethnologie*, vol. xxxvii (1905) 54-90.

Historic Reconstruction. Archaeological research and the analysis of cultural forms are the only approaches by means of which historical reconstructions can be made. In favorable cases the sequence of deposits and fullness of remains may give a clear insight into historical happenings, although there often remain doubts in regard to the direction of cultural movements. European and Oriental prehistory and partly the prehistoric investigations of the Pueblo country, Mexico, Central America and Peru show that considerable parts of local history may be cleared up and that also early relations that extend over continents may be discovered. The analytical study of modern cultures gives us first of all merely a picture of geographical distribution which must be interpreted in historic terms. When adjoining cultures are studied, the fact of diffusion can generally be discovered with satisfactory probability. When the continuity is broken, convincing proof becomes the more problematic, the simpler and the more locally confined the phenomena compared and the greater the distance between the places of occurrence. The direction of dissemination and places of origin are not easily ascertained because the place of highest development and the center of present distribution do not need to coincide with the place of origin. An example of this is the distribution of tattooing, particularly in Polynesia. Most elaborate systems are found in New Zealand and the Marquesas; but these were not the places where the art had its origin. The sledge of the Arctic need not have been invented in Siberia where the most elaborate forms occur; bronze was not invented in Scandinavia where at one period it had a remarkably high development. For these reasons the historical results of an analytical study of culture may be convincing for recent changes in narrow areas

and therefore of great value because they illustrate the kind of cultural changes that are occurring. They may even reveal the processes by means of which these changes came about. The more remote the time and the greater the distances between the areas to be compared, the more uncertain will be the results. A systematic chronological history of the sequence of cultural types the world over, although much to be desired, seems at the present time unattainable.

On the other hand negative evidence based on the presence of certain cultural features in one area, their absence in another, may give important evidence of continued separation. Universal distribution of cultural forms, if substantiated by great prehistoric antiquity, may be taken as proof that the form in question was either carried along by man as his habitat spread over the whole world, or invented repeatedly at a very early time. Stone flaking is almost universal. In a few places where hard woods offer a satisfactory substitute it does not occur. Fire is used all over the world. These have also been shown to occur in palaeolithic times. On the other hand, pottery and agriculture are not universal and they appear only in neolithic times. Metal work is restricted to the Old World and a few advanced tribes of Central and South America. Its invention is much more recent. Nevertheless universality of distribution cannot always be taken as proof of age. This can be seen in the history of Indian corn and of tobacco, which have spread all over the agricultural world since the discovery of America.

The contrast between the Old World and America indicates the early separation of the two continents. The plants on which agriculture is based in America are throughout distinct from those of the Old World, where millet was probably cultivated in gardens. Later, with the introduction of the plough, wheat and barley came in. Rice has been cultivated for a long period in eastern Asia. American agriculture is based on Indian corn, beans and squashes, all American plants. If American and Old World agriculture were historically connected we should have to expect that some of the important plants would be common to both. The American pottery area is separated from that of the Old World by one without pottery in the American Northwest. Domestication of large animals, excepting the dog, is confined in America to the Andean plateaus. Among American traps the spike trap (a ring with spikes turned inward) is absent, although it is common

in the Old World. America does not know the wheel. These differences in material culture are accompanied by others in custom and belief. America lacks an organized judicial procedure. The formal taking of evidence, the oath for the purpose of ascertaining guilt, the ordeal, are unknown in America. Even in Mexico no true ordeal is found. The idea of obsession by spirits which enter the body of the obsessed and belief in the evil eye seem foreign to America. In literary form there is an almost complete absence of the riddle and proverb. The few given by Bernadino de Sahagun (*Historia general de las cosas de Nueva España*, ed. by C. M. de Bustamente, 2 vols., Mexico 1829-30; vol. ii, p. 232-37) may be suspected as due to Spanish influence. These disagreements are much more convincing than the agreements which may be ascribed to parallel development, while the complete disappearance of essential parts of culture complexes seems very unlikely.

On the other hand, Europe and the greater part of Asia and of Africa must be considered culturally as a unit in which most of the traits absent in America have been historically disseminated: cultivated plants; animals of Asiatic origin, as the African cattle; judicial procedure with the taking of evidence, the oath and the ordeal; the abundance of riddles and proverbs; in a large portion of the Old World the ancient use of bronze with the typical fibula; the use of milk; of the wheel; of agriculture with the help of the plough drawn by animals; the belief in obsession.

Primitive Mentality. A distinction must be made between three aspects of primitive mentality. One of these relates to the mentality underlying the type of thinking and feeling expressed in primitive culture; another to the mentality of the individual as a member of primitive society; the third to that of the group. Folk psychology, as it is generally understood, deals with the first of these three aspects. Its basis must be found in the mentality of the individual as developing under social and other environmental stresses and in the forms of mental behavior of the community resulting from the joint action of the individualities formed and forming under these social stresses.

The mentality expressed in primitive culture differs from that prevailing in educated, civilized society in so far as fancied relations between the objective world and the fate of man occupy a prominent part. We call these beliefs, in so far

as they survive among ourselves, superstitions. Included in these fancied relations are those relating to the effects of man's own objective action, reacting upon human lives through their influence upon the real or imaginary objective world—so-called magical art. Notwithstanding the prominence of this aspect of primitive thought the everyday activities and the range of knowledge of primitive tribes show that under other conditions their thoughts are regulated by a clear recognition of the practical means that are required in order to attain an object. Cause and purpose are clearly recognized, both in practical everyday life and in language. The early discoveries of primitive man illustrate his ability to profit by experience and to retain what is practically useful, and the numerous activities by means of which technical or other practical difficulties are overcome prove that in practical activities he acts and plans as we do. Sometimes his work is accompanied by what we might call extraneous actions that have no immediate relation to the object to be attained, such as prayers and observance of tabus and other ritualistic acts, but psychologically there is no fundamental difference between these customs of primitive life and the customs current in our civilization of invoking church ritual in activities that claim particular social importance, such as marriage, legislative and educational meetings or war. The essential divergence lies in different concepts of helpful or hindering powers that have no true causal relation to the actions that are being performed.

The knowledge of nature possessed by primitive man is essentially practical, not systematized, although beginnings of systematization may be found in methods of measuring time and space. The control of nature is imperfect, and untoward accidents in daily pursuits are more common than in work carried through by the perfected machinery of our times. At the same time much of the labor of primitive man is far more essential, in its direct results for the maintenance of life, than in our civilization, in which this relation is felt only through the intermediary of money values. This is one of the reasons that gives a higher emotional tone to many aspects of primitive labor.

It has been pointed out before (p. 94) that the power of influencing the course of events, conceived either anthropomorphically as a will power or as a quality, is believed to be inherent in the objects of the outer world. It does not seem necessary to assume that these concepts

develop through mental processes different from our own, for the experiences of everyday life teach constantly the existence of forces that cannot be overcome and that lead by the ordinary processes of conceptualization to the opposites of normal and supernormal, that is, supernatural, power. Their influence upon human activities is constantly held in mind. Under these conditions the emotional background of life is strengthened, and similarity of emotional attitude forms an associative bond. Thus it may be understood that the principal food animals and the powers that control them may among some tribes present themselves to the mind together, as a unit and in this sense identified, like the Christian Trinity. In the same way a person may identify himself with an animal when the emotional associative bond is strong enough. The warrior who not only acts a bear, but identifies himself with a bear, does so in the particular aspects of warlike ferocity, while at other times he may identify himself with his ancestor or with his totemic animal. This identification is probably analogous to our identification of music and sound waves. The two are identical from the viewpoint of physics, and yet musical form, auditory impression and vibration of the air are distinct. Owing to lack of clarity of expression the partial identification appears as complete.

While the knowledge of nature is not systematized, it is not rare to find that the beliefs of the tribes are brought into a system, generally the more so the more they are in charge of a few or single individuals. The mythologies of the Polynesians, those of the west Africans and those of the Pueblos of New Mexico may serve as examples. Even where the unifying effect of a single mind does not make itself felt, fundamental thought patterns may be recognized that underlie the views and attitudes of the people. This difference is probably due to the lack of a unity that holds together the many scattering observations of natural phenomena, as against the single notion of supernormal power in its anthropomorphic and qualitative form that is the basis of those beliefs and actions which are not derived from the practical handling of objects.

It does not seem necessary to assume on account of these cultural viewpoints that primitive man has a type of mind different from that of civilized man. His intellect deals with the phenomena of the world in the same way as ours, but with a different knowledge which

admits what we should call supernatural interference with the laws of nature.

These considerations are not quite true for the individual in primitive society. In order to understand his way of thinking and feeling, it must be remembered that by education and imitation definite types of mental processes have been established and that a certain traditional content has been transmitted to him. With these he operates. The manner of thinking and feeling and the contents of tradition are normally not subject to critical examination. They form the basis of thought and action. A study of the behavior of primitive man shows that, given his premises, he acts logically. The acceptance of traditional premises is not a proof of a type of thought different from our own, but analogous to our acceptance of traditional theories, right or wrong. The stimulus to criticism contained in our diversified civilization and in the systematic exploration of nature does not manifest itself with equal intensity in other aspects of modern life. It is also not admissible to assume that criticism of tradition and skepticism in regard to traditional dogma never occur. Even the traditional tales of people tell of unbelievers, and individuals are found to whom the supernatural means little or nothing until they are shaken by strong emotions.

The mentality of the group finds expression in the interaction between individuals and in joint action. In so far as interaction between individuals remains in the bounds of individual behavior, it introduces new aspects into the scope of thought and feeling of the individual, but does not introduce other new elements. It is different in cases of joint action, when the close contact among the many releases the reactions of the crowd. The opportunities for expressions of crowd psychology are numerous in all societies in which joint enterprises are common. Joint hunting expeditions, migrations of the tribe from one village to another, group games, war, assemblies with much oratory and singing, group rituals, particularly those combined with dances, evoke the crowd spirit in which the emotional side of the mentality is immensely strengthened, and emphasize the emotionally conditioned associative acts.

The intellectual powers and the will power of primitive man appear different from our own when measured by the motivations characteristic of modern life. When measured by their own motivations these differences seem insignificant. In practical everyday life intelligent effort is

evident; the will power demanded in war, hunting expeditions and in the enduring of hardships imposed by custom is no less than what we find in modern life. There is greater emotional instability owing to the stress laid upon supernormal influences controlling human life and the frequency of group activities. The emotional indifference exhibited in other cases that in modern civilization evoke strong emotional reactions—like the death of infants, or cruelty—shows that there is no essential difference in capacity for control, but that the conditions for exciting strong emotions are different.

Consult: Lévy-Bruhl, L., *Les fonctions mentales dans les sociétés inférieures* (Paris 1910), tr. by L. A. Clare as *How Natives Think* (London 1926), *La mentalité primitive* (Paris 1922), tr. by L. A. Clare (New York 1923), and *L'âme primitive* (Paris 1927), tr. by L. A. Clare (New York 1928); Cassirer, Ernst, *Philosophie der symbolischen Formen*, 2 vols. (Berlin 1923-25); Wundt, W., *Völkerpsychologie*, 10 vols. (new ed. Leipsic 1911-20, vols. i-ii and iv-vi published previously 1900-09); Vierkandt, A., *Naturvölker und Kulturvölker* (Leipsic 1896); Tylor, E. B., *Researches into the Early History of Mankind* (Boston 1878), and *Primitive Culture* (7th ed. New York 1924); Spencer, Herbert, *The Principles of Sociology*, 3 vols. (London 1876-96; vol. i, 3rd ed. 1885); Tarde, G., *Les lois de l'imitation* (3rd ed. Paris 1900), tr. by E. C. Parsons (New York 1903); Boas, F., *The Mind of Primitive Man* (New York 1911); Van der Leeuw, G., *La structure de la mentalité primitive* (Paris 1928); Allier, Raoul, *Les non-civilisés et nous* (Paris 1927), tr. by F. Rothwell as *The Mind of the Savage* (London 1929); Preuss, K. Th., *Die geistige Kultur der Naturvölker* (2nd ed. Leipsic 1923), and *Glauben und Mystik im Schatten des höchsten Wesens* (Leipsic 1926); Werner, Heinz, *Einführung in die Entwicklungspsychologie* (Leipsic 1926).

Laws of Cultural Development. The complexity of cultural development is so great, and the conditions that determine the course of historical happenings are logically so entirely unrelated, that the attempt to give an adequate explanation of the history of any individual society in regard to biological type, language and culture seems hopeless. Under favorable conditions certain specific sequences may be discovered and a strongly generalized picture of some of the fundamental facts in the history of mankind may be ascertained, such as refer to the original home of man, his gradual spread over the world, the sequence of inventions in different parts of the world and the special lines of development followed in continental areas.

The earlier hope of the discovery of a necessary sequence of cultural stages which

would hold good for all mankind has been dissipated. The question remains how far specific laws may be found that express analogous processes occurring in diverse societies. This question may be asked in regard to the biological, linguistic and cultural aspects of social life.

Universally distributed forms, if not carried by early man all over the world, may be interpreted as determined by human nature. The general anatomical, physiological and psychological traits found in all members of mankind are certainly so determined. They are, so far as they are not shared by animals, the specific characteristics of the human species. Upright position, the form of the foot, the development of the brain, the adjustability to animal and vegetable food, the functioning of nervous system and sense organs belong to this group. The most generalized traits of language are also more easily understood as due to psychological necessity rather than to divergence from an early pattern. The classification of experience and the symbolic representation of each class by articulation; the necessity of bringing these classes into relation in order to convey a meaning from person to person; the distinction between the speaker, the person addressed and the object spoken of, are unavoidable characteristics of language. In the same way general characteristics of human thought may be determined. Adolf Bastian saw the prime object of ethnological study in the discovery of these forms of thought, the *Elementargedanken* which may be discovered in every culture, diversified as *Völkergedanken* according to modifications determined by the "geographical province." The classification of experience, particularly as expressed in the separation of object and attribute and the re-objectivation of the attributes, leads immediately to generalized thought forms which, notwithstanding their diversity of form, are expressions of the same mental processes. In this class are also the universal occurrence of inventions and of the objective knowledge of the world, results of physical work; of metaphysical knowledge, due to methods of classification; of religious knowledge, based on the emotional reaction of man to the powers that control him and that he controls; of the standardization of artistic style, and of ethics. From Bastian's point of view the universality of occurrence has particular importance.

Another set of problems refers to laws

governing changes in bodily form, language and culture. The occurrence of a hereditary modification of bodily form will spread or become extinct in the population according to the laws of genetics. Linguistic forms influence one another by analogy; sounds are assimilated or dissimilated. An established cultural pattern will dominate the cultural behavior. General laws may also be discovered referring to specific relations between various aspects of social life. Here belong, in the domain of biology, those dealing with the phenomena of the influence of environment and selection upon form and function of the human body. The increase of stature under the improved hygienic conditions of modern times may be generalized and said to hold good for all populations. Similar problems present themselves in the study of language. Most of these refer to linguistic changes that occur under the stresses of cultural requirements and relate to semantic changes, or to the formation of new words or forms that meet the new needs; to suppressions and replacements due to tabus; or to the formation of metaphorical expressions.

In the discussion of the integration of culture (p. 98) a few of the phenomena that may be expressed in the form of generalizations have been mentioned. Here belong the relation between density of population and increased social regulation; the limiting effect of environment and of economic conditions; and the molding effect of a pattern developed in one domain of social life over others. These generalizations, unless qualified by an application to specific social conditions, are likely to be so vague that their value for the understanding of definite problems is not great, while the specific cases are so complex that the generalizations are no longer applicable to any considerable number of societies.

Although the doctrine of unilinear evolution can no longer be maintained, it seems possible that laws exist that determine the development of a given culture in a definite direction. The gathering of vegetable food was followed by garden culture; the use of stone by that of copper, both in the Old World and in America. The development of modern science proceeds on the whole in a definite direction. As long as the same principles of thought or action persist, general characteristics of development may be predicted. When the beauty of decorative art is seen in an abundance of lines that cover the whole background, the profuseness of decorative

motives will increase, but it can not be predicted either what particular direction decorative motives will follow or when a sudden change in taste may set in. When metaphysical or religious knowledge begins to be systematized the system will be elaborated until a new line of interest turns thought in a new direction. Probably all that can be said is that as long as a certain trend of activity or thought persists it will proceed, on the lines laid down, toward an increasing intensity or complexity. Nothing can be predicted in regard to detailed style of development, the duration of the trend and the new direction that action and thought may take after its termination.

Consult: For Bastian's views: Achelis, T., *Moderne Völkerkunde* (Stuttgart 1896). Also Spencer, Herbert, *Principles of Sociology*, 3 vols. (London 1876-96; vol. i, 3rd ed. 1885); Kroeber, A. L., "The Superorganic" in *American Anthropologist*, n.s., vol. xix (1917) 163-213, and "On the Principle of Order in Civilization as Exemplified by Changes in Fashion" in *American Anthropologist*, n.s., vol. xxi (1919) 235-63.

FRANZ BOAS

See: ARCHAEOLOGY; ANTHROPOMETRY; CULTURAL GEOGRAPHY; HUMAN GEOGRAPHY; PREHISTORY; CULTURE; CIVILIZATION; LANGUAGE; RACE; MAN. See also articles on specific anthropological topics discussed above.

ANTHROPOMETRY may be defined as the measurement of human beings. The term is synonymous with physical anthropology and is an integral part of biometrics, since its data, in large measure, are to be understood only through the use of statistics. The two types of anthropometric measurements gathered are those which are taken on the living and those taken on the skeleton.

Measurements which can be taken on the human form are almost infinite in number, but they have been standardized by anthropologists so that not more than one hundred are utilized. Indeed in actual practise far fewer are considered, and generally too few measurements are taken. Those favored most are head length and breadth, auricular head height, facial height and breadth, nasal height and width, stature, height sitting and bodily proportions, from which various indices are derived. Non-measurable traits such as color of hair, eyes and skin, the form of the hair, the presence or absence of the epicanthic eye-fold, the degree of prognathism, are also noted. In addition traits such as cranial capacity, total height of the head, and measurements of the long bones are usually taken on skeletal material. The most complete

to dominate the *zemstvo* and municipalities. He protested against legislation by which the powers of local representatives of the central government were enlarged at the expense of local self-government. He censured severely the limitation of public education to the upper classes and the pressure exercised against liberal professors. He stigmatized the persecution of the Jews and Ukrainians and of Finland. Arsenyev

thus played the part of leader of liberal public opinion for almost half a century.

From 1891 to 1907 Arsenyev was chief editor of the largest Russian encyclopaedia, Brockhaus and Efron. The judicious choice of authoritative contributors and skilful editing intended to preserve a unitary viewpoint represent Arsenyev's contribution to this important enterprise.

PAUL MILIUKOV

ART

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INTRODUCTION. The consideration of art has from the time of Plato been an inevitable concern of the social philosopher and is coming to be recognized as of first importance for the student of the social sciences. So far from being concerned exclusively with paintings in museums, poems in books and symphonies in concert halls, it is rather to be identified with the whole process of intelligent or directed activity. Used in this sense, art is distinguished from and contrasted with nature and is the name for that deliberate and controlled contrivance by which man interferes with nature in the interests of realizing its intrinsic possibilities. A consideration of art is then tantamount to a consideration of the whole of civilization. The history of art as the history of human contrivance would comprise the whole enterprise of mankind—handicraft, industry and medicine, institutions governmental, legal, educational and religious. From the point of view of the philosopher or the social scientist, considering the whole economy of human interests, art may be described as reason or intelligence in operation. Reflection upon art is thus critical reflection upon all the distinctively human activities of human beings, the methods by which they modify a world which was not made for them but in which they have to grow.

The distinction is usually drawn, however, in aesthetics as well as in social theory, between the fine and the useful arts. The latter, including

all industry, are those techniques or technologies which are practical in their results; that is, those which are concerned with the production of necessities, food, shelter, clothing or such refinements of these or such other goods as the more complex and developed demands of civilized life render necessary. These arts may vary from primitive handicrafts to the complex technologies of modern machine industry. The products, as in the case of Greek vases or basketwork among Indian tribes or furniture among German peasants, may incidentally be objects of art, that is, objects intrinsically interesting and, for their pattern, color or texture or their symbolic expressiveness of some human interest, things of beauty. They may, like the cheap tinware of standardized factory production, be merely things produced as instruments, things of use. But in either case they are distinguished by the fact that from the standpoint of the total economy of human interests they are objects primarily instrumental and serviceable, that they are biological or social necessities rather than luxuries to be enjoyed for their sensuous immediacy, their formal pattern or their expressive intent.

The fine arts are generally distinguished by the fact that they are not primarily valued for their usefulness or practicality, but are immediately enjoyable, the pleasure varying from a merely sensuous delight in the material to a highly intellectual pleasure in the formal pattern

or arrangement and in the work of art as symbolic of something more than is immediately present to the senses. The processes of the fine arts are distinguished from those of the useful arts, especially in the mechanical and industrial forms of the latter, by individuality, by a more refined and subtle deployment of materials and forms, by a greater concern with the meanings which those materials and forms may signify. The artist is more than an artisan; he is a creator and the process of creation is important and interesting to the artist no less, perhaps even more, than the object created. The routine and regimental actions of an operative in a factory, compared with the considered and spontaneous technique of the painter and the musician, are cases in extreme contrast.

In modern civilization since the industrial revolution the distinction between the fine and the useful arts has been rather clearly drawn, but they are not necessarily disparate nor have they always been considered so. In societies in which all the industries are handicrafts the work of the artisan and the play of the virtuoso are intermingled. A pot made to hold or to cook food is susceptible of and subjected to decoration interesting for its own sake and to forms delightful to the beholder quite apart from their utility. In many primitive tribes the basketwork and textiles, although industrial in the sense that they are made to be used, are none the less the work of craftsmen making the whole object and working with reference to beauty as well as to use. Even in an industrial civilization the fine arts and the industrial cannot always be sharply separated. All arts involve a certain amount of technical craftsmanship and even the most useful articles are made with some reference to their appeal as materials and forms. The fusion of beauty and utility is especially evident in architecture, where the beauty of a building and in fact its very existence are determined by considerations of utility and expense.

In a complex civilization, however, the fine arts as well as the artists and their works become comparatively isolated and rare. The term fine arts, therefore, is conventionally used to designate those arts which are concerned with line, color and form (painting, sculpture and architecture), with sound (music) and with the exploitation of words for both their musical and expressive values (poetry and prose).

From the beginning of speculation upon human conduct the fine arts have been subject to social criticism and review. It has repeatedly

been observed by social and moral philosophers, from Plato in the *Republic* down to Tolstoy in *What is Art*, that the artist by arresting attention upon the sensuous surfaces of the world promotes interest in the senses and, it has been inferred, in sensuality. So common indeed has been the suspicion that the sensuous appeal of the arts has a sexual origin and results in sexual excitement—Plato, Plotinus, St. Augustine and Tolstoy all make this capital point—that the artist and his works have been looked upon with suspicion. This is especially true if, as in the case of Plato, an ascetic regime and, in the case of Tolstoy, an ascetic philosophy provide the canons by which any human activity is measured. The traditional quarrel between the artist and the puritan has been the quarrel between those who were frankly interested in the sensuous appearances and surfaces of things and those to whom any involvement or excitement of the senses was a corruption of the spirit or a deflection of some ordered harmony of reason. The history of censorship in the fine arts, if it could be told in full, would be found to revolve in no small measure around the assumed peril of corruption of the spirit by the incitements of the flesh through beautiful things. As St. Augustine put it, there is or should be only one beauty, God.

The moral critique of the fine arts has flowed also, however, from another consideration. That very character of the arts which is regarded as their peculiar excellence—their stimulation of the imagination, their suggestion of a "life beyond life," their character as fictions—has been a source of disturbance to philosophers. Works of art turn the imagination away from the actual social order to some imagined and more desirable world. It was on this account that Plato counseled in the *Republic* a censorship of the arts, so that only those myths should be told, those songs be sung, which would impress upon the popular imagination the fixed pattern of the prescribed perfect state. The artist has been justly regarded, as Shelley regarded the poet, as the "unacknowledged legislator of the world," but any society makes this admission only with alarm. Just as suicide is said to have become a fashion after Goethe's *Sorrows of Werther*, so any form, myth, pattern of life may seduce by its imaginative compulsion and discredit the socially established, the morally conventional pattern. It is not for nothing that rigid and fixed regimes, like those of Fascism in Italy or Communism in Russia, have

been scrupulously stringent in their control of the literary arts. And the plastic arts, although in lesser degree since their explicit expressiveness is more limited, may be deflectors from the established patterns. By the same token, however, an artist, if his imagination be in consonance with the established social, moral or religious order, may become its imaginative synthesis, as was Dante, or its imaginative defender and demonstrator, as was Milton in "justifying the ways of God to man." But in general the literary artist has tended to be a revolutionary rather than a conservative. To picture or even to mention "the light that never was, on sea or land" is to turn the imagination from what is to what may be or at least to what once to conceive would be to desire.

The arts are also suspect if judged by canons of practical or industrial efficiency. Unlike useful things or the tools used to produce them works of art apparently serve no function other than immediate enjoyment. "A thing of beauty is a joy forever," perhaps, but in a society where goods are measured by utilities aesthetic enjoyment is regarded as a distraction from socially more profitable pursuits, and aesthetic creation is considered the trivial pastime of citizens who might be employed in useful labor. A civilization predominantly industrial or pioneer, where the practical is or must be emphasized, is prone to regard with suspicion or contempt the apparently effete and unimportant activities of either the artistic creator or the connoisseur. The arts, considered practically, are the by-play of the aesthete or the virtuoso; they are not the serious concerns of the adult citizens of a commonwealth that has problems of food, shelter and complicated human adjustments to meet, that has disease to conquer and the land to cultivate, suffering to reduce and death to overcome.

The critique of the fine arts from the point of view of their sensuousness, their imaginative dissolution of prescribed social patterns or their practical uselessness has nevertheless been unable to obscure the fact that the arts are at once social in their origins and in their consequences and must be reckoned with as a central and ultimately as a self-justifying social activity. There are theories of art, like those of Schiller and Groos, that find the origin of the fine arts in the play activity of the individual or in one or another biological impulse, notably that of sex and sexual display. But the forms of art are determined and its themes are largely conditioned by the social circumstances in which

the artist works, the themes that preoccupy the public to which he addresses himself. Thus in many primitive societies the arts of music and of poetry are closely associated with the ceremonial of war, work or religion. Greek drama began, as the modern anthropological study of Greek religion makes clear, in ritual, and Gothic architecture arose in the service of and as the expression of Christian creed and Christian church organization. In literature the themes of a writer, whether he is protesting against, expounding or simply representing his age, are reflections of his own social tradition. The history of art is thus the history of the embodied social imagination. Indeed from the point of view of the social historian, all objects of art—novels and poems and sculpture as well as buildings—are *monuments historiques*. The interests and absorptions of a period, a nation, a race or a social class may be studied in terms of what they produce and value in the fine arts.

If the arts are social in their origin it is also beyond question that they are, whatever the artist may say about art for art's sake, whatever the moralist may say about the individualism of the artist, social in their functions. Even the most esoteric tastes in the arts represent the preferences of a group, however small, and the shifting standards of taste throughout the history of any art are testimony to the operation of fashions, of social imitativeness, of social prestige operating in the arts as elsewhere. The history of a reputation in the arts is a capital illustration. El Greco was for centuries neglected as wild and uncouth, and Shakespeare's reputation in the eighteenth century, when "enthusiasm" was at a discount, was wholly different from his prestige during the romantic period in the nineteenth century, and in the twentieth. Works of art are thus embodiments of current tastes and values which are correlative to preferences in fields other than those purely aesthetic. They serve to express and to consolidate whole epochs of opinion and of emotion, so that the dress, furniture, poetry and architecture of a period, no less than its professed philosophy or religion, are the embodiment of its spirit or temper and its controlling social traditions.

But the social functions of the arts are more than the embodiment of current tastes and the satisfaction of current forms of the demand for sensuous excitements or formal pleasures. The arts serve in an important sense the same function in the race that play does in the indi-

vidual. On the part of the artist, despite the fact that the arts involve technical difficulties and that their pursuance often entails social sacrifices, they have something of the quality of play and they constitute a type of spontaneous action which any polity might well wish to insure for all its citizens. And for the aesthetic observer or participant they afford moments of immediate satisfaction, whether it be that of material, of form or of expressiveness as the symbolization of humanly interesting themes. The arts, then, are instances of spontaneous action and immediate enjoyment. They have often been regarded by social philosophers as anagrams of larger and more comprehensive arts. Thus to Aristotle statesmanship was an architectonic art and life, the "good life," itself an art whose fulfilment is happiness.

There are still further reasons, largely historical, why it is impossible to separate art in either theory or practise from social considerations. The history of the arts is conditioned not a little by economic circumstances, so that it is no accident that the greatest bursts of artistic production have occurred in wealthy and in leisure class societies: Athens in the classic period and Florence during the Renaissance. Their history in both the Occident and the Orient has also been closely intertwined with the embodiment of religious feelings and beliefs in ceremony, ritual and liturgy. The arts have at one time or another been the media of social or moral propaganda. In our contemporary civilization the increasing mechanization and industrialization of life and the pervasiveness of a mechanical theory of nature have made the arts for many a kind of romantic escape. It remains to be seen whether the new order, as its detail becomes familiar and emotionally realized, will generate an art as expressive of an age of science and machinery as the Elgin marbles are of Greece and as Chartres Cathedral is of mediaeval France. It remains further to be seen whether the dominance of a machine technique and the lapse of an aristocratic tradition will make possible the continuance of that tradition of craftsmanship out of which the artist class came in the past or that tradition of taste which has always been associated with a leisure class.

IRWIN EDMAN

PRIMITIVE. Two basic tendencies of expression are normally present in the graphic and plastic art of primitive and unlettered peoples:

the decorative and the representative. These of course are to be found also among ourselves, but with the greater diversification of our art and culture as a whole they are generally more sharply segregated with us than among primitives. The relatively higher degree of fusion, or non-differentiation, of the decorative and representative impulses is one of the principal criteria distinguishing most primitive arts from our own.

Another difference is that uncivilized people, speaking broadly, tend to make with their own hands most of the art objects which they use, each individual for himself. The product of the best workers is indeed prized and sometimes traded at a premium. There are individuals who are master craftsmen and sometimes family lineages of such; or a whole settlement may become known as proficient in some ornamental handicraft and its wares be sought after. There is never, however, quite the degree of specialization that our culture has brought about, in which at best only an insignificant part of the art expressions which we use or own have been made by our individual selves. No one in primitive society earns his whole livelihood by practising art. In general every adult member of one sex in a tribe possesses at least a moderate proficiency in the arts in which a few are reckoned superior. This is a phase of the stronger participation of primitive people in the totality of their culture and the smaller scope of "personality" among them. It is a phase, too, of their tendency to think or feel in terms of making rather than, as we do, in terms of products.

Naturally, technological influences are strong in art. Ethnologists have often delighted in pointing these out. Sometimes they have thought themselves able to discover the origin of most or all aesthetic form and ornament in manufacturing processes or utilitarian devices. This view is psychologically too one-sided to be tenable as a general principle, but it is without doubt applicable in certain cases supported by historical or archaeological evidence. Bowl legs do sometimes come to take on the shape of fishes or men, handles degenerate into birds or heads. But this does not mean that all ceramic modeling originated in a utility, just as no economic system can be explained wholly in utilitarian terms. The textile arts, especially, lend themselves to derivation of design from manipulation. Twilling, for instance, is but a slight extension, mechanically, of the simplest

in and out wicker or checker work and necessarily produces a pattern even in monochrome, which the introduction of elements of another color accentuates. Plain twining with colored elements inserted one, two, three, four times in successive courses yields a right angled triangle; one, three, five, seven times, an equilateral one. But of course such "unnecessary" manipulations would scarcely have been attempted and certainly not regularly repeated if they had not been found intrinsically pleasing. Psychology cannot be left out in understanding art, primitive or civilized.

A frequent trait of primitive art is its so-called symbolical character. A part is made to stand for the whole. Less significant elements are suppressed. Among the Pueblos three lines down from a semicircle denote rain falling from clouds. Among the Haida a dorsal fin differentiates a killer whale from other mammals, or is even sufficient to indicate a killer whale. Sometimes, as in the Pueblo example, such symbolism has magico-religious significance. Sometimes, as in the Haida example, it has not, and is essentially a stylistic convention or heraldic device. In many cases the primary reason for the "symbolism" seems to be inadequate power of execution strongly fortified by stylistic hardening. In central and northern Australia the same figure may stand in different contexts for perhaps a tree, a frog, a grub egg, a locality or a person; but the figures used are of certain types, such as concentric circles, and never of others such as crosses. The art style is therefore determinant as well as the religious purport. In Navajo sand paintings, figures and their costumes are carried out with great exactness and different animals or plants invariably distinguished. In Luiseno sand paintings, circles stand indiscriminately for horizon, night, milky way, world and soul, and spots or heaps of pigment for mountains, places or animals; the mystic tendency is as strong as among the Navajo, the artistic execution far weaker. Much primitive symbolic art is not mystic at all, but is better described as representative through visually inadequate forms. It corresponds to such devices of our newspaper cartoon art as letters flowing out of the mouth, exclamation points about the head, the body falling over backward to express surprise, a log and saw in a cloud to represent sleep and snoring, a Maltese cross to denote the point of impact. Largely because of this quality petroglyphs, which are most often the work of scattered individuals,

can normally not be interpreted by the tribe and soon have their meaning forgotten.

Conventionalization, due either to inadequacy of aesthetic means of expression or to repetition and loss of interest, is often progressive, until the original representation is no longer recognized by the makers. Parts are lost, disturbed or displaced; only a rudimentary abbreviation may remain. The end product may be wholly geometric in appearance or, in pottery design, come to resemble cursive writing. Art production for trade may lead to such simplification or slovenliness. It was at one time thought by some students that all geometric or purely decorative design could be derived from representations through this process of conventionalization; but this is as one-sided a view as the universal derivation from technique or from magic. There are some fairly well authenticated cases of progressive conventionalization, as in the carving of New Guinea and the pottery of Central America. Yet even in these instances the development or presence of a definite decorative style is as important a factor as the gradual loss of representative significance.

There is also reinterpretation of decayed designs or secondary interpretation of designs of technological origin. Such cases may be difficult to prove, but their possibility has always to be reckoned with. A figure occurring in the decorative art of a number of related or adjacent tribes may be read with a different meaning by all of them. The same cross may denote a star, a fly or the meeting of paths to as many groups; a zigzag, respectively a snake or lightning or a river. If the technology and the style coincide it is clear in such cases that the design has had a common origin and single history in the area, but that its several meanings had secondary and diverse histories.

The decorative tendency normally prevails over the realistic in primitive art, at least to our feelings. This effect is probably due in part to the high development of realistic achievement in occidental art of the last few centuries, which makes us see chiefly decorative value in products whose realistic or successfully imitative qualities are imperfect. The principal primitive arts that are frankly although simply realistic without attempt at formal decoration are those of later palaeolithic western Europe, of the Bushmen or their predecessors in South Africa and of the Eskimo.

These three arts are perhaps historically connected through the Bushman and Eskimo

cultures which are partial survivals in remote areas of the palaeolithic. This however is suspected rather than proved, and the origin of palaeolithic art in the Aurignacian and its disappearance from western Europe with the close of the Magdalenian period are unexplained. It also appears that the realistic Aurignacian-Magdalenian art had as contemporaries a semi-geometric Solutrean art in eastern Europe and a conventionally representative Capsian one in northern Africa. Even these realistic arts, with some doubtful and slight exceptions, do not attempt perspective, foreshortening, shadows or values, composition or landscape. They do represent skilfully the proportions, postures and even movement of animals, mostly in profile, but occasionally from front or rear or bending back. Human figures are less successfully portrayed. Artists of the palaeolithic culmination in the late Magdalenian shaded pigments into each other. Both this and Eskimo art carved in the round with equal aptness. The same diverse directions that are found in modern primitive arts were thus already being followed ten to fifteen thousand years ago.

The lack or meager development of perspective, values and other aesthetic devices in primitive art is not surprising in view of their incomplete rendering in such sophisticated and high arts as the Chinese, Japanese, Greek, Byzantine and Early Renaissance. Like harmony in music these objectives and devices appear only once in human history, namely in western Europe since the Renaissance. It is largely the absence of these same traits to which we are accustomed that makes even primitive arts of high quality tend to seem either grotesque or monotonous to us on first contact with them. The high formal or aesthetic value of some primitive arts is more quickly recognized by artists and of late they have begun to draw upon them, as a generation earlier they tried to be influenced by the Japanese. It is doubtful, however, whether modern art can borrow more than an occasional stimulus or suggestion from primitive art; as between harmonic and non-harmonic music the difference in basis of form, feeling and objective is probably too great to allow any really successful transfer.

A distinction deserves to be made between truly primitive arts growing up in isolation or in contact only with others of the same kind, and derivative primitive arts which are demonstrably more or less dependent on civilized ones. Peasant arts are essentially of the latter category;

so are most of the so-called primitive arts of Asia, Malaysia and perhaps Africa. The appliqué, embroidered and painted designs of the Amur region tribes, for instance, have a character of their own, but most of the motives and stimuli go back to the Chinese. The Hindu influence in Malaysia and perhaps ancient Egyptian, Mediterranean and Mohammedan influences in most of Africa represent similar derivative tendencies. An unlettered people can occasionally achieve an art of high distinction on such foundation, as witness the bronzes of Benin in west Africa and the wood carving of several tribes there and in the Congo. But this seems to be the exception. Normally, dependent and peasant arts tend to geometric or floral design or a naive, somewhat inept realism. They please, but hardly stir.

On the other hand the arts of native America, Oceania, Australia and South Africa, which were much more remote from the high centers of Eurasiatic culture, bear to our civilized eyes a far stronger quality of primitiveness, that is, of mingled grotesqueness and creativeness. This does not mean that they are necessarily wholly original; but a substantial isolation in time and space has made them practically independent. Northwest coast American art may possibly derive its first impulses from eastern Asia, but such a derivation can no longer be traced and in the main the distinctive qualities of this art are a native development. Similarly Maori art may be related to that of Melanesia and ultimately Asia, as its spirals suggest; but its special aesthetic qualities must have been developed subsequently, after intercommunications had ceased. Of this same original quality are the high arts of Mexico and Peru, culminating in that of the Maya; and probably also of the ancient Egyptians and Sumerians. Early China seems promptly to have remodeled the western influences that at one time or another reached it; so did India, whose great sculpture is all post-Greek, although within a few centuries the proved Greek stimuli had been so readapted that only a specialist can find them. In general the primitive arts with a character of originality depict persons, animals or hybrids of these and avoid floral or plant motives; or they are wholly geometric like the basketry art of the California Indians.

Much has been learned about primitive art from the study of archaeology. Where inscriptions are lacking, stylistic relations and relations of physical association in the ground are the

two chief tools of investigation. In a number of instances archaeology has been able to work out a cyclic history of primitive arts more or less parallel to that of the historically documented arts, with archaic, mature, flamboyant and decadent phases. Spinden's treatment of Maya art (Peabody Museum, *Memoirs*, vol. vi, Cambridge, Mass. 1913) is an excellent case. The ceramic art of Nasca in Peru shows the same stages. The ultimate history is, however, quite variable. The Nasca art had passed its flamboyant phase when it was impinged on by the alien highland art of Tiahuanaco. It quickly became degenerate and soon died out completely. As the Tiahuanaco influence waned, a new local art grew up in the district, the so-called Ica style, which substituted textile-like geometric pattern and elegance of shape for the polychrome representative design and originality of form of the Nasca art. Aesthetically the Nasca and Ica styles have nothing in common, although their historical continuity through the intrusive Tiahuanaco style is established. In northern Peru the superb early Chimú pottery modeling and painting was displaced, apparently before its disintegration had commenced, by the same Tiahuanaco intrusion. But when this faded there was a genuine renaissance, and late Chimú came on the scene, a composite, eclectic style which retained many features of early Chimú but gave up its color and substituted varied elegance for the earlier imagination. The history of Peruvian art as a whole is one of replacement of originality by restraint; the last style of all, that of the Incas, is classically elegant in shape and severe, with floral suggestions, in design.

Maya art had passed through its archaic, mature and flamboyant stages when it was temporarily checked by a convulsion or readjustment of Maya culture as a whole. When it resumed, decorative tendencies were ascendant; representation maintained itself without becoming really decadent, although with loss of aesthetic vigor. Meanwhile, however, Maya art appears to have stimulated the peoples to the east, the Chorotega, and to the west, the Zapotec and Toltec. Both the latter achieved distinctive styles of their own of considerable merit; and on the Toltec was based that of the Aztec, which attained in sculpture a grandiose grotesqueness and severe exuberance. Chorotegan art, to the contrary, tended to lose both inner and outer meaning of form, perhaps because the general culture did not reach sufficiently

intensive levels. None of the great American arts has been traced back beyond archaic, sub-mature phases; the really formative stages remain unknown.

The question of the origin of the art impulse is a difficult one. It is not even certain that there is in man any innate impulse to express himself in visible art. The early efforts of civilized children to paint or draw prove nothing because they grow up in an environment of pictures, not to mention pencils, pigments and paper. It seems most reasonable to assume that there exists in man something of an inborn impulse to shape creatively, but that the form which this shaping takes is determined culturally. If a culture is pictureless no individual reared in that culture will attempt to make pictures and he may have difficulty in recognizing them as such on first experience. The problem cannot be answered categorically because no cultureless human beings exist. Observations on anthropoids, who seem to be wholly cultureless, show their fondness for draping swinging or vinelike objects on their bodies. The appeal here is primarily tactile or passively kinaesthetic, a heightening of body consciousness. Apes will also smear paint on surfaces, but without trace of design. The satisfaction in this case seems to be actively kinaesthetic and in the visual perception of the fact that an effect is being produced, much as an infant tears paper without attempting to shape designs. It is in impulses such as these, first kinaesthetic, then perhaps rhythmic, after a time with recognition of the visible rhythm pattern, that decorative art perhaps first began in man. Representative art may be a later stage of this development or a separate growth.

How far primitive folk derive an aesthetic thrill from their art is difficult to decide, because their cultures are not given to expressing finer distinctions in subjective states. It is clear that the artist derives satisfaction when his work is good and that the community shows quick appreciation of quality. A primitive community will as a rule esteem as superior the same particular specimens of its art which are highly valued by a civilized artist, collector or traveler.

A. L. KROEBER

See: ANTHROPOLOGY; TRADITION; MAGIC; RITUAL; ORNAMENT.

FAR EASTERN. *India*. The art of India is the art of many disparate territorial groupings, sometimes loosely independent, sometimes held

Hoppner and the Scottish Henry Raeburn, Sir Thomas Lawrence, facile, seductive in his easy way, continued the aristocratic tradition in portraiture. The caricaturists, Rowlandson and Gillray, commented rudely on their polite era. Others strove dully after heroic painting; still others gave themselves up to the pure genius of landscape. And William Blake, one of those portents irrelevant to time and place, thrown like a brand by a mocking angel, painted his visions of heaven and hell, where folk with pink Flaxman-like faces rise rapturously or fall headlong on the tides of Jehovah's favor. The Romantic Movement was near.

RACHEL ANNAND TAYLOR

See: RENAISSANCE; REFORMATION; HUMANISM; CLASSICISM; RATIONALISM; SALON.

MODERN. Modern art may be said to begin with the end of the eighteenth century. It is the direct and immediate outgrowth of the inter-reaction of several factors: the death of the movement known as the Renaissance, clearing the field for further influences; the advent of democracy potential with individual freedom and eclecticism; the beginnings of man's new quest of knowledge concerning human life and the world, to supplant that mediaeval version which disappeared with the old order; machinery and the industrial revolution, both foster children of scientific investigation; science and modern thought itself, considered apart from their material application.

In art the Renaissance came to an end with the delicately high bred creations of the artists immediately preceding the French Revolution. These works reflect the narrow margin upon which aristocracy had come to operate. The building of Gabriel and the painting of Watteau abound in technical excellence and beauty, and in conception they are still creative. But they lack sincerity and stamina and this lack spells the end of a cycle. The background of society was wearing thin and cynicism threatened the roots of every faith. With the French Revolution society sank into the melting pot. Artists no longer painted voluptuous pastorals for aristocrats; the occasion for them had gone. The new pattern for art was the aesthetic counterpart of that classical idealism to which men now turned for salvation through democracy.

Before the French Revolution the mid-eighteenth century turn for archaeology had brought to light the remains of Palmyra and Baalbek as well as of Spalato in Dalmatia. The brothers

Adam visited Spalato, and Piranesi the engraver immortalized their findings. These and other new classical models provided what was needed to lure creative art, already beset and confused by ideas and ideals, toward directly copying ancient forms. As early as 1757 Soufflot, designing the Panthéon, had so come beneath this influence that the building was more Roman than French. This classic revival was the turning point, the instant when the stage was set for modern art. The work of David, who imbued his paintings with the rigidity of Roman bas reliefs, is the outstanding example of the straining toward the purity of Greek outline. Whether retelling the tales of antiquity or painting Mme. Récamier, there was no escape from cold classical formulæ. Throughout Europe this vogue obtained, this passion for rationalizing, destroying ancient myths, facing truth with classical clarity. The movement was felt with particular force in the architecture of the republican period in the United States.

Two more phases preceded the dawn of modern conditions while the forces of industrialism and scientific research gathered headway. The first of these was romanticism; the second was realism.

Romanticism swept Europe as the result of two centuries of rationalizing. In society as well as in individuals there must occasionally come a reckoning between intellect and emotion. In art this point came at the outset of the nineteenth century. Napoleon's wars had left delirium in the minds and tragedy in the hearts of all, a logical impasse from which escape came in a way already foreshadowed by Goethe, Rousseau and Beethoven, in a wild tide of pent up emotion. Chateaubriand, Delacroix and Wagner rushed with romantic yearning to release the feelings of Europe. Creative art had been reduced to a state of sterile copying; now the flame of emotion was rekindled although it was still within the borrowed classic or mediaeval mold. Throwing the restraints of David to the winds, Géricault and Delacroix painted pictures which resemble the works of their contemporaries in literature, Hugo and Scott. Later Ingres and Daumier added the weight of their powerful personalities to the movement, the one refining and concentrating expression, the other in his satirical lithographs giving romantic vividness to the play of contemporary life.

In architecture romanticism took the form of another revival, the Gothic. Originating in

England, where as early as 1753 Horace Walpole had built Strawberry Hill, it found favor as the national architecture of England where classical styles had never been thoroughly understood. Ruskin, Pugin and Scott raised it to the level of a crusade and littered England with wretchedly planned and thinly executed Gothic copies. In France Viollet-le-Duc restored the *cit  * of Carcassonne, the Ch  teau of Pierrefonds and built several churches. France, however, instead of continuing the Gothic sentiment produced Duc, Duban and Labrousse, who made of the late classic revival a new and creative style known as the neo-Grec.

Realism in art was largely due to the newly created interest in landscape painting. This interest was first felt in England and came from the vogue for rusticity inculcated by Rousseau. Constable and Bonington proved how landscape could be painted for its own sake, naturally, and not as a grouping of classical fragments in a glamorous antique setting. It spread into France together with a vogue for rustic gardening. Thus in the mid-nineteenth century, with England painting landscapes and sentimental insipidities and building copies of Gothic architecture, France, having burnt out a fierce reaction from classical severity, turned gradually toward realism through landscape. A society so tremendously altered as that of Europe had now become, under the growing domination of scientific thought and industrial economy, could little longer sustain the dead weight of worn out revivals imposed upon the genius of her creative artists.

With the advent of machinery it was at first quite naturally attempted to reproduce in quantity the type of handcraft which had preceded it. The result was aesthetically disastrous. Craftsmen had to turn from creative work to tending the machine which performed their labor; this divorced the crafts from the fine arts and debased first the skill of the craftsman and, still further, public taste. About 1850 the confluence of factors contributing to the decline of craft reached a climax. Patrons of art seemed blind to its ugliness for they were more interested in the novelty of machinery. The crafts and applied arts and with them architecture labored beneath complete subordination to industrial ends.

A different development occurred in the realm of painting and sculpture. Unencumbered by the problem of finding an outlet through industry, painting moved in the wake of advancing

thought and freeing itself for the last time from academic formulae sought more directly the elementary aspects of existence in unadorned realism. Landscape painting increased as men turned their attention to that twilight of natural phenomena which science had begun to illumine. Nature was no longer looked upon sentimentally or heroically, but as the little known and fascinating earth peopled by individuals interesting enough as human beings.

The realistic phase was followed by the first definite imprint of science on art. Physicists had shown the solar ray to be broken into the seven colors of the spectrum when passed through a crystal. Working with this discovery a group headed by Claude Monet and Auguste Renoir, labeling themselves impressionists, embarked upon the painting of atmosphere itself. They forgot the drawing of form in an attempt, called *pointillisme*, to juxtapose small flecks of pure color in such a manner that when observed at a proper distance the colors fuse, as do the primary light rays themselves, into semblance of living atmosphere. Only with new material, new questions to propound, could art increase its scope and emerge beyond a condition of limited repetitions. Democracy, altering society, disturbed the traditional balance while science held the lamp to new discoveries. For science, bursting in upon exhausted realms of mysticism and philosophy, took the dogma from art, substituting the play of sunlight, the rhythms of nature.

The great figure of the nineteenth century in painting is undoubtedly C  zanne. Coming late among the impressionists he profited by their knowledge of color but advanced beyond their narrow formula. Moreover he appreciated the magnificent wholeness of conception of the old masters and grasped the fact that for a century artists had been attempting the solution of single facets only of the problem of painting, one at a time. In projecting his personal experience, his own psychology, into his canvases, he set the pattern for all art since his day and made of painting once more a whole in which color contributed volume and in which the individuality of the artist comes to expression, replacing a content of set and stylized subject. C  zanne was the first artist to confess the dawn of an age of psychology and relativity. His curious personality, his way of subordinating actuality to his own point of view and his distorting and suppressing of externals in order to reveal the deeper, simpler truth are as yet

understood by few. He discovered the turning point and released art in a new direction so that since his time few have dared lift brush to commit the repetition of what had been already too often said. To Cézanne's should be added the names of Gauguin, also a Frenchman, and Vincent Van Gogh, a Dutchman painting in France. The former contributed, in his revolt from society, the exotic forms and colors of the South Seas where he sought exile, while the tragic half mad life of the latter became the subject, indirectly, of his passionately individual canvases.

While France, ignoring the presence of Cézanne in her midst, officially sustained the Academy and its train of waning romanticist tradition, England followed with delight the play of the pre-Raphaelites and their stylized insipidities under the guidance of Ruskin. Romanticism persists to this day in England, where Gothic is as popular as ever. The art of the remainder of Europe during the nineteenth century is marked by the same tendencies exhibited in France.

Sculpture followed the bent of painting. The classical phase is best represented by the remarkable reliefs of Rude on the Arc de Triomphe. During the reign of romanticism Carpeaux, Dalou and Chapu carved majestic and formal groups allegorical in sentiment. The new theme appeared with Rodin, who freed sculpture from its non-essentials, sentiment and over-rendering, substituted a knowledge of form itself and acknowledged the beauty of his elementary material, marble or bronze. Sculpture was thus brought once more into the realm of plastic form and revitalized in an attempt to purify it and to realize its greatest beauty within its natural scope.

It was due to the great expositions and to the idealism of one man that industrial art began its slow and painful advance. At the Exposition of 1851 in England William Morris beheld vast ugliness in the midst of spurring prosperity. He fought thereafter to awaken in industrial centers some aesthetic conscience and by his own example to show how machinery and art might harmoniously combine. But not even Morris went back to the point of asking what is the unique expression of machine technique. The answer to this problem was to come only with the substitution of thought for eclecticism.

Throughout Europe and the United States eclecticism, the practise of selecting and borrow-

ing a style, continued in vogue even after the lapse of the classic and Gothic revivals. With the advent of photography and increased printing facilities information concerning the art of the past had become more available than ever. While conditions of life altered and the invention of iron and steel construction, elevators and electricity began completely to revolutionize the problems of building, architects still continued the practise of borrowing raiment for their buildings. Industrial art too followed this practise of borrowing. The habit of fitting form to function under new conditions had not emerged. The illogicality is evident of adorning a steel frame with classical masonry which instead of supporting itself must be drilled out and hung on supports.

The vogue of eclecticism may in part be traced to the condition of public taste during the spreading of democracy. In abolishing aristocracy society abolished that rich heritage of taste which, built up during centuries of upper class domination, had controlled all save peasant art. Artists in general were then under the patronage, directly or indirectly, of a social body given to leisure, wealth and power. Aristocracy had been the arbiter of both temporal and aesthetic welfare. *À bas les aristocrates*, the cry of the French Revolution, dragged with it both the taste of Europe and the position of the artist in society. Bourgeois ascendancy engulfed traditional taste together with the patron who recognized the merits of good art. It supplied nothing to replace this function. In France the Academy dogmatically persisted in keeping alive the traditional standards of painting but the effort was lacking in vitality and creative force. The effect on the artist was to plunge him from a position of power to one of dependence upon a public in general unable to distinguish between good and bad work. This led to the reputation for eccentricity which the artist even to this day enjoys, by inducing him to retire as an unappreciated individual to a corner where he might work out dreams unmolested by the ridicule of a prosperous middle class. From this impasse the materially successful artist has emerged only by taking the popular fancy. Painters of the obvious, the sentimental and, above all, reproducers of the historically sanctioned past have succeeded best. To the bourgeois eye the best is the safest and the safest is that with a pedigree.

Eventually there emerged from this situation a few men strong enough to stand on their own

feet and attempt to resist the inertia of complacency. William Morris, Cézanne and Rodin represent the leaders of effective revolution. Forced through idealism to stand apart from the rabble, their thought drove art forward. From them sprang directly a new creative progress once more growing and maturing. They gathered up the loose ends of tradition as a developing, not a static, thing and courageously searched their environment for the solution to their problems.

With the dawn of the twentieth century the seed sown by William Morris had begun to ripen into a well defined movement toward the improvement of industrial art and even of architecture. While England still labored with the situation, in France a movement initiated by Siegfried Bing known as L'Art Nouveau challenged the supremacy of academic eclecticism. L'Art Nouveau sought in a return to natural sources a means of rehabilitating design but it neglected the problem of materials and imposed upon larger forms motifs which could be successful only in the smaller field of jewelry and ceramics. Lalique had begun his laboratory researches, seeking new materials and processes to bring the industrial manufacture of glassware and ceramics into the modern world. A more profound note was sounded in Austria, where Otto Wagner led the "secessionists" in a war on borrowed form. Recognizing the inevitability of steel in all its significance, practical as well as aesthetic, he preached the doctrine of fitting form to function and produced the first thoughtful architecture of his age. His lead was followed in Germany, where the founding of the Kunstgewerbeschule resurrected and stimulated art among the people, with the result that even before the war Europe had its first view of the new German industrial art. This art, originating in the small industries, is chiefly responsible for the pattern of what is known as the "modernistic" style today.

The war while it retarded did not check the progress of industrial art. Immediately after the termination of hostilities France emerged with a startling array of new techniques and a well developed style which had left L'Art Nouveau far behind. This work was based chiefly upon the pre-war German patterns from Munich. The idea of the "ensemblier," one man as the designer of everything from the architecture to the upholstery of a house, originated in Paris. This resulted in the development of individual styles widely divergent in appearance but related

by sharing a common modern spirit. The great Exposition des Arts Décoratifs of 1925 summed up this field somewhat prematurely. In this exposition decorative invention and new forms ran riot but only on the surface. Deeper down lurked economic and philosophic problems of vast significance. Despite this dazzling new technique, the problems of cost, how steel should be used and what modern life demanded in planning remained untouched. The great industrial expositions have always been commercial rather than artistic in their aim, yet their influence in the field of art has been enormous.

In the United States the World's Fair set the development of architecture back of the eclectic stage by a quarter of a century. With such men as Louis Sullivan already building creatively with steel, America gazed once more upon irresistible Rome and relapsed again into the habit of borrowing. Even in New York the skyscraper, a unique affair but one which stated the problem of steel, continued to be ornamented with columns and cornices. The expression of the beauty of this steel fabric in a purely functional façade was first introduced by Saarinen, the Finn, in his designs for the Chicago Tribune Building. The eyes of Europeans more than those of Americans were turned upon American architectural problems. The question was this: why, when Americans built steamboats, airplanes, bridges and locomotives directly and simply, did they become confused and baffled when it came to pure architecture?

The growing economic factor of quantity production in its relation to architecture has recently been logically met by several European architects of whom the spokesman is Le Corbusier. He represents the goal of absolute purism in architecture. He accepts every facet of the modern program and retains no vestige whatever of the past. His buildings of steel and reinforced concrete vary from anything ever seen before in their functional planning, expression of volume and restraint of decoration. His doctrine is that of *bel outillage* or accepting the machine age and living with it. He is thoroughly scientific and mechanical. His adversaries, the conservative modernists, are content to advance more slowly and see whether or not we want an exclusively machine built age.

In painting since Cézanne we find the field clearly divided. The conservatives, bitterly but steadily losing ground, cling to the Academy, to the canons, and yield only slowly to the

expansion of new ideas. The modernists, fully imbued with the sense of the new world of science, grasp the fact that today life is infinitely extended in time and space. Science has destroyed set form in thought, life and art. The modernist painter is wholly individual, part psychologist, part sociologist and part physicist. All of this has meant revolution in art with many different leaders. The first group to be noticed were the "Fauves," or wild men, led by Matisse. They emphasized flatness and extreme simplification. Seeking to reproduce the essence of things, viewed solely from the painter's unique angle, ignoring literal verisimilitude and photographic perspective, they kept only color and design. The naive Rousseau, "le douanier," painted his queer outlook on life with the vision of a child, with rare skill and sense of pattern.

Pablo Picasso studied the significance of Negro and Polynesian sculpture for plastic form. He may also be said to have invented cubism, the most important movement in modern art. Cubism is abstraction in terms of three-dimensional space. It comes directly from Cézanne. Defined somewhat mystically "cubism is not an art of imitation but an art of conception which strives to elevate itself to creation," or "the art of painting a new ensemble of the elements borrowed not from the reality of vision but from the reality of knowledge." Here is the scientific reintegration of consciousness in art. At this point objectivism ceases and scarcely a trace of literal subject matter remains in a canvas. The isolation of the individual artist's point of view and the subordination to it of all other considerations have reached a climax. To the layman nothing is revealed save a meaningless pattern of colliding lines and planes to which the painter and his initiates retain the key. The vogue for pure cubism has been for this reason somewhat limited. Its direct effect, however, in the matter of elimination and simplification has been felt by nearly every young painter of this day and attention more than ever has focused upon the essential issues of painting. In meeting these issues the shadows used by the impressionists have been supplanted by objects created in planes through the use of color. Derain has produced work of importance and also Raoul Dufy, Vlaminck, Marie Laurencin and Kokoschka.

During the first half of the nineteenth century, painting in the United States came increasingly beneath French influence as young American

artists crossed the ocean to study at the *École des Beaux Arts*. Whistler and Sargent, both Americans, neglected their native land to follow the continental life and passed from Courbet to the impressionist group. Other American impressionists include Mary Cassatt, Childe Hassam, Robert Henri and his pupils, the best known of whom was George Bellows. Today, strongly influenced by cubism, a group of young Americans are attempting to throw aside the continental tradition and paint in their own manner. John Marin, using water color, paints vigorous abstract landscapes; Georgia O'Keeffe abstracts the forms of plants and flowers; Charles Burchfield paints the pathetic grotesqueness of mid-western cities; and Charles Demuth executes landscape and still life. All of these artists confine themselves almost entirely to the small picture, since economic pressure has had its effect on wall space. There are few homes today large enough to hang a big canvas, a factor of great importance in present day development. The names of Max Weber and in particular Eugene Speicher, one of America's greatest living portrait painters, must also be included.

American art is still nebulous. Up to the present the United States has had nothing to say about itself, a condition to be anticipated in so new and strangely compounded a civilization, lacking strong tradition. Today, however, there is an astonishing number of young artists, well trained and infatuated with the ideal of a national art. They are laying the foundations of an articulate expression.

EDWIN AVERY PARK

See: DEMOCRACY; INDUSTRIALISM; SCIENCE; PROLETARIANISM; COMMERCIALISM; PURITANISM; REALISM; ROMANTICISM; MEDIAEVALISM; PRIMITIVISM.

See also: ARCHITECTURE; DANCE; MUSIC; LITERATURE; WRITING; THEATER; MOTION PICTURES; INDUSTRIAL ARTS; DRESS; MACHINES AND TOOLS; SYMBOLISM; TRADITION; CULTURE; CIVILIZATION; STANDARDIZATION; COMMERCIALISM; EXPERT; AMATEUR; ARISTOCRACY; PATRONAGE; SALON; ART COLLECTING; TASTE; CRITICISM; CLASSICISM; ROMANTICISM; REALISM; HUMANISM; RATIONALISM; MEDIAEVALISM; PRIMITIVISM; COSMOPOLITANISM; LOCALISM; DECADENCE; MUSEUMS AND EXHIBITIONS; LEARNED SOCIETIES; EXPOSITIONS, INDUSTRIAL; CIVIC ART; PURITANISM; CENSORSHIP.

Consult: GENERAL: Phillipps, L. M., *Art and Environment* (New York 1911); Lalo, Charles, *L'art et la vie sociale* (Paris 1921); *Art and Civilization*, ed. by F. S. Marvin and A. F. Clutton-Brock (London 1928); Magonigle, H. Van Buren, *The Nature, Practice and History of Art* (New York 1924); Lorquet, Paul, *L'art et l'histoire* (Paris 1922); Triggs, O. L., *The*

which he ventured beyond the Romanist field, the *Theorie des heutigen deutschen Strafrechts* (Leipzig 1857-59), he accepted Hegel's absolute theory of punishment, but upon the premise of the historical school. He accepted it not as the only right one but as the one historically realized in the German criminal codes of his time—a position consistent with his championship of common law elements.

WILLIAM SEAGLE

Consult: Stintzing, R., and Landsberg, E., *Geschichte der deutschen Rechtswissenschaft*, 3 vols. (Munich 1880-1910) vol. iii, pt. i, p. 692-93 and 847-52; Gradenwitz, Otto, in the *Zeitschrift der Savigny-Stiftung für Rechtswissenschaft*, vol. xxxvii (1916), Romanistische Abteilung, p. vii-xxxvii.

BELIAYEV, IVAN DMITRIEVICH (1810-73), Russian historian. For almost twenty years Beliaev occupied official positions in various Moscow archives and after 1852 was professor of Russian legislative history at the University of Moscow. In *Vremennik*, the publication of the Moscow Society of Russian History and Antiquities which Beliaev edited from 1848 to 1857, and in other publications he printed a great deal of hitherto unavailable archive material. As author or editor he published over one hundred works, some of which are considered standard monographs. They deal with a variety of subjects in the social and economic history of Russia from the ninth to the fifteenth century: the clergy, town government, peasantry and the agrarian order, state finances and the monetary system, military organization, law and the sources of legal history.

Beliaev was in general agreement with the Slavophile interpretation of Russian history; he contributed to various Slavophile publications and took a prominent part in the controversy between the Slavophiles and "Westernists" (*zapadniki*) regarding the peasant land commune (*obshchina*). He attempted to show that these communes were the dominant form of social organization in ancient Russia and the product of the Slavic *Volksgeist*. His Slavophilism was not a closely reasoned philosophic system but the result of his great sentimental attachment to ancient Moscow. The works to be mentioned in this connection are his book on peasants in Russia (Moscow 1860, 2nd ed. 1879), which is a classical treatise on land communes, and the four volumes of Russian history (Moscow 1861-72) forming a part of a projected twelve-volume work and covering the history of the northwestern territories of Novgorod, Pskov and Polotsk.

Beliaev's was in many ways pioneer work in the social, economic and provincial history of Russia, but it suffered from a somewhat uncritical treatment of the sources and from the lack of a broad philosophical and sociological background.

BORIS EVREINOV

BELIEF. Because of its intimate relation to conduct, belief has been of continuing interest to social philosophers and its psychological nature a frequent subject of study. An important modern analysis of belief was that of Hume, who viewed it as a psychologic state differing from imagination only by its greater vividness and steadiness. It is at present generally recognized that to the extent that an idea fills the mind to the exclusion of possible alternatives we tend to hold it true. Thus fixed ideas and inflexible beliefs arise in a state of mental debility. Certain recent psychologists emphasize, as did the patristic and scholastic writers, the active element of assent in the judgment that something is true. Romantic philosophers have stressed the purely voluntary character of this assent; while others insist that when we truly believe, as when we truly love, we feel compelled to do so. The recognition that we have a choice means that another view is possible, and this is implicit doubt. One may, however, distinguish between the compulsion of the evidence of the subject matter and the inner compulsion of one's own nature to hold a proposition true despite the absence of objective evidence sufficient to silence the doubt of others. From this point of view beliefs differ in degree of intensity, indicated by such phrases as, "it is my opinion," "I am persuaded," "I am unalterably convinced."

Whatever the psychological characteristics of belief, it is clear that its specific forms are largely social in origin and are in many cases conditioned by our habitual emotional reactions with the result that through following a certain mode of life one generally ends by sharing the beliefs of others who follow that mode. Hypocrites are scarce because it is so easy to believe that which our conduct professes. Men generally believe that their professional groups, their nation, their city or section of the country, their college or fraternity, have certain inherent superiorities wholly invisible to outsiders. The social determination of belief is even more evident in such phenomena as booms, panics, crazes or fads. Le Bon has pointed out that in a crowd the beliefs or opinions of the wiser members are

generally depressed to the level of the majority. For the power of suggestion increases rapidly with an increase in numbers and it is always difficult to maintain opinions or practises different from those professed and approved by one's associates. Heretics who defy the opinions of the multitude depend all the more intensely on the devotion of their supporters.

Beliefs are transmitted not only unconsciously but also through the direct and intentional pressure of parents, teachers or other authoritative leaders. Both types of transmission are most effective in small homogeneous communities. It seldom occurs to a member of such a group even to doubt its prevailing views. The processes of intercommunication, commerce, travel or the mixing of diverse peoples in large cities break down such primitive certainty. "To have doubted one's own first principles is the sign of a civilized man," Mr. Justice Holmes has said. The state of doubt is, however, difficult and unpleasant. Doubt, "where all is double," requires much free intellectual energy. It complicates and renders more difficult our practical choices. To rid themselves of this burden most people rely on natural leaders and authorities or cling resolutely to certain plausibilities. Some attempt to follow the method of science, questioning everything until doubt is no longer possible; but since action must often precede the acquisition of adequate knowledge a large number of practical beliefs cannot be based on scientific evidence. Many firmly held beliefs are positively irrational and rest on excessive credulity or obstinate pride of opinion. Such beliefs are of the essence of superstition. The tendency to regard any chance coincidence of two events as a case of causal connection has not only led to various primitive, magical ideas, such as those attributing disease to the evil eye, but continues to add to the modern fund of superstitions. Persisting legends or myths, such as those glorifying certain statesmen as free from human imperfections, testify to man's perennial credulity, his will to believe that which is simple and pleasant.

Philosophers have long differed as to the way in which beliefs influence social evolution. Deterministic theories minimize their importance; beliefs are said to be only the ideologic reflections of the physical environment, of the racial inheritance, of the system of production, of the interests of the dominant class or of irrational emotions and feelings. On the other hand men have commonly believed in indoctrinating children and adults with the proper beliefs,

whether by education, propaganda, preaching, advertising or various more indirect methods. In recent years, with the growth of psychologic interpretations of social development, the role of beliefs has been increasingly emphasized. The widespread recognition that the belief in science and the scientific method has revolutionized modern life is accompanied by the assertion that other types of belief have been equally or even more effective.

It is an ancient view, shared by such writers as Plutarch and Machiavelli, that religious and even superstitious beliefs are necessary for social life, "to manage and reform the vulgar." This idea appears in a modern sophisticated version in the theory of Sorel and Ross that myths or illusory beliefs are necessary to give *élan* and direction to social movements. These theorists have failed, however, to show by analysis what kinds of myths are effective, for obviously not all myths are influential. Again it has been held, notably by Kidd, that rational beliefs are always individualistic and that socially desirable conduct requires the subordination of the individual to the interests of the race, a process which can be sanctioned only by supernatural religion. This theory shows traces of the old view that religious peoples are the strongest. Doubts as to the complete social value of religious beliefs arise, however, from a survey of such facts as the religious sanctions of celibacy, slavery, the caste system or the sacrifice of children to Moloch; they arise even more strongly from a study of the extermination of such groups as the Albigenses and the Waldenses, because of the tenacity of their religious beliefs, and of the serious retardation of others by religious wars. The supposed facts about primitive life, assembled by Frazer to prove that superstitious and magical beliefs have strengthened respect for government, for life and property, for marriage and sexual morality, and have thus made for greater security, can be offset by an equally long list of the horrible effects on social life of various magical beliefs and superstitions.

More convincing is Max Weber's theory of the importance of religious ideas in molding economic development, and specifically his attempt to show that protestant asceticism led to the development of modern capitalism, although many of its underlying assertions have been successfully challenged, notably by L. Brentano, and although Weber has not made out a case for direct causal relation. The ambitious effort of Durkheim and his school to show that "the

fundamental categories of thought and consequently of science are of religious order" is based upon a view of religion which makes it synonymous with all the ritual of social life. But the fact that people take part in a common ritual or cult does not always mean that they have a common belief. Here too there is insufficient evidence of a definite causal relation between belief and the course of social evolution.

It is nevertheless true that most societies have felt the acceptance of certain beliefs essential to their survival, and have attempted by various means to suppress the practise and spread of other beliefs. In closely knit communities departures from group standards are so rare as to cause little concern. Few, if any, peoples previous to the Greeks thought it necessary to formulate the beliefs underlying their religion or their family, clan or industrial organization. While certain expressions were regarded as endangering the community because they might bring down the wrath of the gods or of evil spirits, speculation itself was considered too unimportant to require suppression. It is when religious organizations become voluntary and a definite formula of belief for admission to a group is necessary that dogma and creed appear. And it is when a society includes many different elements that the non-acceptance of certain beliefs first becomes a problem. Thus there is no creed or dogma in the Old Testament. The early development of the Christian church in the midst of hostile religions and its subsequent incorporation of so many diverse national groups and practises led to its insistence on the suppression of heresy. Unity of dogma was all the more urgent when the Roman Empire fell and the Catholic church tried to continue to rule different provinces subject to different temporal powers. Having assured the acceptance of its great central beliefs, the Catholic church has since allowed a great diversity of opinion and practise among its members; but the importance assigned to belief by the Christian tradition has continued to influence the history of the western world.

Political considerations have often led temporal rulers to support religious beliefs, while regard for public order and tranquillity have been the basis of many persecutions of heretics. The gradual secularization of thought and the more complete separation of church and state have led to a decreasing interest on the part of political rulers in religious beliefs and a consequent removal of religious disabilities. In Eng-

land commercial expansion and the growth of dissent in the middle classes and in the cities led to the Toleration Act of 1689 and later to the emancipation of Catholics and Jews, the removal of religious tests for holding property or public office. One of the last steps in this direction occurred in 1877 when the English universities ceased to require adherence to the Thirty-Nine Articles as a prerequisite for fellowships and other privileges.

But with the growth of religious tolerance economic, political and social beliefs have assumed a greater importance and have become the subject of increasing attempts at control by governments or by voluntary associations. Modern governments, regarding socialism as a danger, have disqualified its adherents from certain honors, dignities or offices. It is often alleged that American universities adopt similar methods. Certainly belief in a heterodox code of marital or sexual relations might prevent a man from being elected to public office in some parts of the United States or in Great Britain. The United States excludes immigrants who believe in philosophic anarchy and it excludes from admission to citizenship those who believe that the law of God or conscience may take precedence over the call of the state to bear arms. After the World War an attempt was made in New York state to bar from teaching in the public schools those who did not believe in the existing form of national or state government. Similar attempts to prevent the dissemination of certain beliefs have been made in most modern states; while under dictatorships both the control of the expression of opinion and the development of methods of fostering beliefs approved by the ruling group have reached a high degree of perfection. In revolutionary movements as well, such as the socialist or communist parties, the need is strongly felt for formulated creeds to which adherents must subscribe so that heretics may be removed. Toleration of beliefs contrary to those one cherishes is possible only where there is a certain security and only for those who care more for scientific rectitude in the search for truth than for any of its results.

MORRIS R. COHEN

See: CONDUCT; CUSTOM; TRADITION; SUPERSTITION; RITUAL; RELIGION; PUBLIC OPINION; PROPAGANDA; CONTROL, SOCIAL; CIVIC EDUCATION; CHURCH; DOGMA; APOSTASY AND HERESY; BLASPHEMY; ATHEISM; CENSORSHIP; ANTIRADICALISM; INTOLERANCE; RELIGIOUS FREEDOM; ACADEMIC FREEDOM; FREEDOM OF SPEECH AND OF THE PRESS.

Consult: Hume, David, *Treatise on Human Nature*,

views are held today by many, probably a large majority, of social workers, criminologists and other students who urge instead a sentence of life imprisonment with some scheme of commutation of sentence in connection with reconstructive psychological and educational treatment. Those who favor the continued use of the death penalty have long since ceased seriously to use any argument but that of a postulated necessity.

Capital punishment maintains its hold as a human institution because of the fear and resentment which murder excites and because of a persistent faith in its necessity either as a deterrent influence or as the only conclusive means of protecting the community against a convicted malefactor. For this faith there is not the slightest evidential support. Again and again in European and American states capital punishment has been abolished without any resulting increase in the homicide rate, and in many cases its revival has not resulted in the slightest diminution. Statistical evidence is uniformly negative. Indeed, a study of murderers and of the conditions under which murder takes place tends to indicate conclusively that of all criminals the murderer is the one least likely to be deterred by contemplation of the legal consequences of his act. Another important consideration is the fact that where conviction will mean death juries hesitate to pass an irrevocable sentence, and thus allow men of probable guilt to go free. As a consequence fear of capital punishment is probably much less of a deterrent than fear of a less extreme but more certain punishment would be.

GEORGE W. KIRCHWEY

See: PUNISHMENT; CRIME; CRIMINOLOGY; PARDON; SANCTUARY; POLITICAL OFFENDERS; HUMANITARIANISM.

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CAPITALISM

THE CONCEPT OF CAPITALISM. *Introduction.*

The concept of capitalism and even more clearly the term itself may be traced primarily to the writings of socialist theoreticians. It has in fact remained one of the key concepts of socialism down to the present time. Nevertheless, it cannot be said that a clear cut definition has ever been attempted. Even Karl Marx, who virtually discovered the phenomenon, defined only certain aspects of capitalism as the occasion required. When the term is used by socialists in any definite sense it has the character of a political byword with a strong ethical tinge.

Despite the fact that capitalism tends to become the sole subject matter of economics, neither the term nor the concept has as yet been universally recognized by representatives of academic economics. The older German economists and to a much greater extent the economists of other countries rejected entirely the concept of capitalism. In many cases the rejection was merely implicit; capitalism was not discussed at all except perhaps in connection with the history of economic doctrines, and when it was mentioned there was no indication that it was of particular importance. The term is not found in Gide, Cauwes, Marshall, Seligman or Cassel, to mention only the best known texts. In other treatises, such as those of Schmoller, Adolf Wagner, Richard Ehrenberg and Philipovich, there is some discussion of capitalism but the concept is subsequently rejected. In the newer economics it is recognized as indispensable or at least useful, but the uncertainty as to its exact meaning is generally expressed by quotation marks about the word. Representatives of this school are little inclined to attempt the constructive development or more accurate analysis of the concept.

The works of Sombart are the first in which the concept of capitalism has been definitively recognized as fundamental to the system of economic thought. Here it is demonstrated that

capitalism designates an economic system significantly characterized by the predominance of "capital," and it is argued that the word "capitalism," which by its very etymology suggests this feature of the economic system, must be retained as the appropriate term for it. The fact that this term has received a negative ethical emphasis in socialist literature should not qualify its use as a completely non-ethical designation for a definite economic system, particularly since there is apparently no better substitute.

Capitalism as a specific economic system cannot be understood without an analysis of the concept of economic system with a view to pointing out the function of this concept in economic science. Economic life is distinguished as a particular sphere of cultural life by the principle of "economy." This principle as a logical concept is removed from the realm of space and time, but "economy" in the sense of economic life is an existential complex with definite spatial and temporal aspects. All culture, and consequently all economy, is historical. As there is in the abstract no religion, no art, no language, no state, but merely a certain religion, a certain art, a certain language, a certain state, so there is no economy in the abstract, but a particularly constituted, historically distinguishable economic life.

The task of all the cultural sciences is to find ways and means by which to grasp cultural phenomena in their historical singularity. A certain field of culture is rendered scientifically mature when science learns to determine its place in history on the basis of its concrete historical manifestations and to distinguish it in its characteristic phases from other concrete manifestations of the same cultural principle. This is achieved by the introduction of a formative conception not derived from empirical observation, which makes possible the construction of systems. Thus linguistics utilizes the conception of inherent language form, the science of religion the conception of dogma, the science of art the conception of style.

Economic science likewise requires a constitutive conception in order to arrange its material in systems. The function of such a conception is to enable us to classify the fundamental characteristics of economic life of a particular time, to distinguish it from the economic organization of other periods and thus to delimit the major economic epochs in history. A conception which will make possible the systematization of economic phenomena must be derived directly

from the notion of "economy," the essentials of which it must comprise, collate and connect—and not merely in their abstract form, not merely as ideas, but in the concrete, as definite historical facts. These requirements are satisfied by the general conception of the economic system. By an economic system is understood a mode of satisfying and making provisions for material wants which can be comprehended as a unit and wherein each constituent element of the economic process displays some given characteristic. These constituent elements are the economic spirit or outlook—the sum total of the purposes, motives and principles which determine men's behavior in economic life—the form of economic life or the objective system of regulations of economic relations, and the technology employed in economic processes. Defined more precisely, an economic system is a unitary mode of providing for material wants, animated by a definite spirit, regulated and organized according to a definite plan and applying a definite technical knowledge.

It will be observed that the economic system is superior to all other systematizing conceptions hitherto employed, because they stressed merely single prominent characteristics and made it possible to distinguish only single aspects of economic life, whereas the conception of the economic system is broad enough to comprehend every aspect. On the other hand, it is definite enough to encompass the historical concreteness of economic life and is thus far superior for the purpose of framing a system to purely formal ideas such as that of national economy (*Volkswirtschaft*). Finally, it is general enough to permit of application to every conceivable economic institution from the most primitive to the most highly developed.

The Spirit of the Capitalist System. The special character of capitalism will be brought out most clearly if we consider separately the characteristic forms which the three constituent elements—spirit, form and technology—assume in the capitalist system.

The spirit or the economic outlook of capitalism is dominated by three ideas: acquisition, competition and rationality.

The purpose of economic activity under capitalism is acquisition, and more specifically acquisition in terms of money. The idea of increasing the sum of money on hand is the exact opposite of the idea of earning a livelihood which dominated all precapitalistic systems, particularly the feudal-handicraft economy. In pre-

capitalistic systems economic as well as all other thought and action was centered about the human being. Man's interests as producer or as consumer determined the conduct of individuals and of the community, the organization of the economic life of society as a whole and the ordinary routine of business life in its concrete manifestations. Goods were produced and traded in order adequately to meet the consumers' needs and to provide an ample livelihood for producers and merchants; the standards for the expectations of both consumers and producers were fixed by long established usage. The category of qualitative use value was the determining principle of valuation. All social and individual norms affecting economic processes were grounded in human, personal values. On the other hand, in systems dominated by the idea of acquisition the aim of all economic activity is not referred back to the living person. An abstraction, the stock of material things, occupies the center of the economic stage; an increase of possessions is basic to all economic activity. The idea of such an economic system is expressed most perfectly in the endeavor to utilize that fund of exchange value which supplies the necessary substratum for production activities (capital).

While acquisition constitutes the purpose of economic activity, the attitudes displayed in the process of acquisition form the content of the idea of competition. These attitudes, which are logically inherent in acquisition, may be described as freedom of acquisition from regulation by norms imposed upon the individual from the outside, the lack of quantitative limits to acquisition, its superiority over all other aims and its ruthlessness.

By reason of its freedom from regulation capitalism rests essentially on the individual's assertion of his natural power. Every economic agent may and should extend his sphere of action as far as the complete exercise of his powers will allow; in case of failure, however, he completely foregoes assistance. Economic activity is closely associated with personal risk, but the economic agent is free to strive for economic success in any way he chooses provided he does not violate the penal code.

There are no absolute limits to acquisition, and the system exercises a psychological compulsion to boundless extension. The fact that capitalistic enterprise has as its purpose a certain mode of utilizing a stock of goods signifies a complete divorce of the aims of capitalistic

economy from the personality of the economic agent. The abstract, impersonal character of the aim indicates its limitlessness. Activity in the capitalistic system is no longer determined by the needs, quantitatively and qualitatively limited, of one person or of a group of persons. Profits, no matter how large, can never reach a level sufficiently high to satisfy the economic agent. The positive drive toward boundless acquisition is grounded in the conditions of management. It is empirically true, though not logically inevitable, that any enlargement of business reacts to its own advantage, at least quantitatively through an extension of its sphere of exploitation and sometimes also qualitatively through a reduction of costs. This provides the stimulus to the continuous expansion of a business, often contrary to the expressed wishes of its owners and managers. In this peculiar orientation of human activity upon an infinitely removed goal lies the reason for the dynamic potency of the capitalistic system, a potency which renders intelligible all its remarkable achievements.

Acquisition therefore becomes unconditional, absolute. Not only does it seize upon all phenomena within the economic realm, but it reaches over into other cultural fields and develops a tendency to proclaim the supremacy of business interests over all other values. Wherever acquisition is absolute the importance of everything else is predicated upon its serviceability to economic interests: a human being is regarded merely as labor power, nature as an instrument of production, life as one grand commercial transaction, heaven and earth as a large business concern in which everything that lives and moves is registered in a gigantic ledger in terms of its money value. Ideals oriented upon the value of the human personality loosen their hold upon man's mind; efforts for the increase of human welfare cease to have value. Perfection of the business mechanism appears as the only goal worth striving for; the means become an end. The vague notion of progress comes to include only such developments as advances in technology, reductions in costs, increase in the briskness of trade, growth of wealth. *Fiat quæstus et pereat mundus.*

Acquisition which is quantitatively and qualitatively absolute degenerates eventually into unscrupulousness and ruthlessness. Business draws practical conclusions from the revolutionary supremacy of its ideals and seeks, without consideration for any conflicting inter-

ests, to clear all obstacles to the limitless and unqualified exercise of acquisition. The intensity of the acquisitive drive attains a point at which all moral and temperamental inhibitions disappear and all conflicting drives become inhibited. The business man is "unscrupulous" in his choice of ways and means, because the selection is based exclusively on their serviceability in the achievement of the final goal, on their usefulness as instruments of acquisition.

When the direction of economic affairs is oriented solely upon acquisition it is inevitable that those modes of economic behavior should be adopted which seem most rational, most systematic, best adapted to the purpose in hand. In the old, precapitalistic economic organization, which is essentially traditionalistic and static, there sets in a process of rationalization representing a manifestation of the dynamic principle. Economic rationality is thus the third dominating idea of the capitalist system.

Economic rationality is manifested in several aspects of the capitalistic business management—its predilection for long range planning, for the strict adaptation of means to ends, for exact calculation. The genuinely capitalistic enterprise is managed on the basis of a plan which extends as far as possible into the future, thus leading to the introduction, among other things, of roundabout methods of production. The execution of the plan is accomplished by means which are painstakingly examined with reference to maximum serviceability for the purposes in hand—a vivid contrast to the ill considered employment of means in more traditionalistic economies. Underlying the planning and its execution are the evaluation and registration of all business facts in precise quantitative terms and the coordination of these records as a significant whole. This adherence to exact accounting is only natural in a situation where all economic acts are regulated in accordance with their pecuniary value and where management looks to maximized profits as its ultimate aim.

Rationalization permeates, of course, the entire scope of business and affects its technical as well as its commercial aspects. It introduces into the sphere of production the most "rational" methods and stimulates thereby the development of scientific technology. It creates rational factory management and leads to proper departmentalization and departmental coordination. The rationalization of the procedures of manual labor results in the employment of the individual worker most serviceably with respect

to the ultimate capitalistic aim. On the commercial side rationalization affects the purchase of production equipment and materials, the sale of the ready product at the most suitable time or in the best market, the creation of new outlets whether through clever salesmanship or through the development of new forms of retailing.

Economic rationality penetrates gradually into other cultural spheres, reaching even those which are only remotely connected with economic life. Under its influence all untamed natural growth disappears and, where it proves disturbing, even the aesthetically individual is mercilessly weeded out. The idea of strict adaptation of means to ends, one of the essential ideologic props of capitalism, permeates the totality of culture and leads in the course of time to a purely utilitarian valuation of human beings, objects and events.

While individual action under capitalism is informed by the ideal of highest rationality, the capitalistic system as a whole remains irrational, because the other dominant capitalistic idea, that of acquisition, of the unrestricted assertion by the individual of his power, leaves the regulation of the total economic process to the uncoordinated discretion of individual economic agents. From this coexistence of well nigh perfect rationality and of the greatest irrationality originate the numerous strains and stresses which are peculiarly characteristic of the economic system of capitalism.

The Form of the Capitalist System. The objective, institutional order of capitalism is characteristically free. The dominance of economic individualism has its counterpart in the far reaching independence of the individual economic agents. The restrictions which law and usage impose upon them affect only the most marginal of their activities; essentially restrictions are intended to forestall merely criminal dealings, leaving a wide area of discretion to the individual. "Economic freedom," an aspect of the philosophy of natural rights, assumes, when regarded as an element of the economic order, the form of a system of positive rights conferred upon the individual by law and morals; these positive rights constitute the substance of economic liberalism.

Capitalistic business is typically private, so that economic initiative is lodged with enterprises which are actuated by the quest for private gain. These enterprises, subject to little regulation from the outside, assume the full risk of failure but enjoy also the unrestricted

chance of success. Their activity keeps the economic machinery of society in motion.

The structure of capitalist economy is aristocratic. The number of economic agents is small as compared with the total number of persons participating in economic life, with the result that a large majority is subject to the power of a few economic agents. In a regime of economic freedom the relation between the economic agent and the persons controlled by him takes appropriately the legal form of a free contract. The dominance of a minority is explained by the fact that because of the high standard of technical knowledge and organizational skill required under capitalism people of average abilities and fortunes are incapable of assuming the direction of production and can therefore no longer act as economic agents as they could under the handicraft system.

The capitalist system, based as it is upon highly developed occupational specialization and functional separation, is marked by a high degree of decentralization. The principles underlying the division of labor in capitalist industry differ from those which governed handicraft economy to the extent that the segregation of a certain range of activities into a distinct branch of industry is determined not by the outlook and limitations of a living personality but by purely material factors, the causal sequences of the technological processes. Organic articulation enforced by an active, creative person is superseded under capitalism by purposefully directed mechanistic separation and coordination. The degree of specialization depends ultimately upon the advantages which it may bring to the private economic agents in their pursuit of profits.

Capitalist economy rests upon an exchange basis, the links between its constituent elements being the connections and relations established in the market. All production is intended for the market, is characteristically limited to the production of saleable goods; all products enter into commercial traffic. Similarly all means of production emerge from exchange transactions, are purchased in the market. No less important is the fact that the connection between economic agents and the persons controlled by them is established by contract entered into in the market; labor is thus treated as a species of saleable goods. The relationship between wants and their satisfaction through production is established indirectly through the medium of price, which regulates the quantity and character of output. Since the guiding principle of capitalism is gain,

there is production only if prices yield profit, if they offer to the individual enterprise the prospect of economic success. This system of satisfying wants is therefore flexible, unlike the systems found in economic organizations oriented directly upon the satisfaction of needs. Distribution of the results of production, involving as it does a conflict between various groups, particularly between the two great classes of recipients of surplus value and of wages, is likewise regulated through the mechanism of pricing.

Finally, the organization of production under capitalism is not limited to any single form. Although large scale production predominates, production on a small scale (e.g. domestic system) also has its place in the system.

The Technology of the Capitalist System must satisfy certain conditions. To begin with, capitalist technology must insure a high degree of productivity. It cannot fall below a certain minimum, because capitalist organization of production, involving necessarily the differentiation between the work of organization and management on the one hand and that of technical execution on the other, would then be impossible. For example, as long as every hunter can manage to subsist on the yield of his daily hunt, there is no room for a capitalist organization of hunting under the leadership of an organizer who does no actual hunting himself. Moreover, this productivity must be as high as possible, because, other things being equal, an increase in productivity means a correspondingly greater profit to the capitalist enterprise. The compensation of the wage earners, which is limited to the amount needed for subsistence, can with increased productivity be produced in a shorter time, and a larger proportion of the total working time remains therefore for the production of profits. Again, an advance in technology, particularly in the technique of transportation, involves capitalist expansion whether through an extension of the markets or an intensive accumulation of stock. Capitalist expansion under these conditions is accompanied by an increase in total profits and, in view of the decline in the costs of production, by a rise in the profit rate.

The technology characteristic of the capitalist system must also lend itself most readily to improvement and perfection. For constant technical improvements are an important weapon in the hands of the capitalist entrepreneur, who seeks to eliminate his competitor and to extend

his market by offering goods superior in quality or lower in price. Moreover, such improvements yield a considerable differential profit, since the entrepreneur can realize a profit larger than the average so long as his improvements do not become widely accessible, and thus tend to reduce the socially necessary production costs. It will be observed that the quest for differential profit is an important dynamic factor in capitalist society.

The scientific, mechanistic technology, which is based on the accomplishments of natural science and breaks through the limitations of an organic environment, meets the tests both of productivity and of perfectibility. In addition, the ideas underlying this technology are in precise correspondence with the spirit of the capitalist system. Thus the rationalistic spirit which permeates this technology merely testifies to the fact that the economic principles of capitalistic organization have been applied to its technical processes. The inorganic character of this technology finds its economic counterpart in the divorce of economic life from the personality of the individual, in the impersonality of all economic relationships. The depersonalization of commercial as well as technical management transforms them into satisfactory instrumentalities for the practise of a technology based on the depersonalization of human labor.

The Capitalistic Enterprise. Modern capitalism made its appearance with the development of the capitalistic enterprise. It represents the form through which an independent existence is granted to business as such. By the combination of all simultaneous and successive business transactions into a conceptual whole an independent economic organism is created over and above the individuals who constitute it. This entity appears then as the agent in each of these transactions and leads, as it were, a life of its own, which often exceeds in length that of its human members. This integrated system of relationships treated as an entity in the sciences of law and accounting becomes independent of any particular owner; it sets itself tasks, chooses means for their realization, forces men into its path and carries them off in its wake. It is an intellectual construct which acts as a material monster.

The capitalistic enterprise has its own aims or, more properly, it has a single, very definite goal, profit; for only this particular goal corresponds to its spiritual essence. While it is in a sense sheer tautology to say that profit is its only goal, for conceptually the capitalistic enterprise is

nothing but an instrumentality for the purpose of profit making, it is nevertheless of great significance that in this economic construct the spirit of the capitalist system and the aims of the individual economic agents become merged. Since the aims of these individuals are essentially arbitrary because they are freely determined, it is merely a happy coincidence if the immanent spirit of capitalism, acquisition, appears also as the subjectively experienced motive for individual action in the form of a striving for profit. The motives of capitalistic entrepreneurs are by no means restricted to acquisitive drives; among them we find a motley array—the desire for power, the craving for acclaim, the impulsion to serve the common good, the urge to action. But as all these motives work out in the capitalistic enterprise, they become, by virtue of an inner necessity, subordinate to profit making. For on closer examination it appears that none of the strivings which actuate the entrepreneur has any chance of success unless the capitalistic enterprise itself is successful, unless it yields a surplus above cost. Whatever other desires the entrepreneur may entertain, whatever subjectively conceived purpose his work may serve, he must always, simply because he is a capitalistic entrepreneur, want his enterprise to flourish, and so concentrate his energies upon the making of profit. This transformation of the subjective purposes of the entrepreneur in the capitalistic enterprise objectifies the quest for profit. The fact that the capitalistic enterprise performs this function justifies the inclusion of the spirit of capitalism as a factor in the causal sequences of capitalist actuality. We do not depart from the realm of fact when we relate the spiritual essence of capitalist economy to its actual driving forces, the motives of the capitalistic entrepreneur, by showing that because of the objectification of the striving for profit these appear to be the necessary realization of this spirit. Marx aptly spoke of “the drive of capital for profit.”

In addition to an aim distinct from the purposes of its owners the capitalistic enterprise has a separate intelligence: it is the *locus* of economic rationality which is quite independent of the personality of the owner or of the staff. At first rational business methods, objectively adapted to make the business profitable, are developed only in the course of time as a crystallization of experience; but in the period of full capitalism we observe the characteristic activity of artificial and self-conscious creation of economic

rationality. Rational business methods are steadily and systematically developed and improved by persons who devote all or part of their time to this pursuit, which may itself be directed toward profit making. Thousands upon thousands of people, ranging in occupation from professors of business disciplines to humble bookkeepers, from downtrodden computers to manufacturers of all sorts of office equipment, are engaged in a perpetual quest for ways and means of perfecting economic rationality. As a result of these manifold efforts there exists at present a highly developed and constantly improving system of procedures (supplemented by specifications regarding the physical equipment to be employed therein) designed to insure business efficiency. This system is important primarily because it exists independently of any specific concern and is applicable to any line of business. Such a ready made economic rationality can be bought by the entrepreneur and installed in his concern to regulate it for the future.

Finally, the capitalistic enterprise possesses also the bourgeois virtues of industry, thrift and stability, which the entrepreneur in the early days of capitalism had to cultivate in his own person in order to achieve success. These have now been transferred to the business concern and it is possible for the entrepreneur himself to dispense with them.

The infusion of the capitalist spirit in material objects affects in a number of obvious ways the course of economic activity. In the first place, management becomes more intensive, business planning more definitive. The incorporation of human beings into a material system fixes a definite minimum of energy which must be put forth: just as the speed of the worker is determined by that of the machine, so the tempo of work of the office force, from president to errand boy, is set by an external factor, the routine of the enterprise. The knowledge at the disposal of the executive is also increased thereby; now it far surpasses his personal erudition. Yet he is no longer burdened with the problem of the perfect organization of his business, which formerly consumed a large proportion of his energy; he is relieved of much useless activity and is thereby freed for specifically entrepreneurial work. Secondly, objectification of the capitalist spirit helps also to extend its domain. Thus the spread of the capitalist ideology over the entire world and to all strata of the entrepreneurial class is easily explained by the fact that economic

rationality can be readily transmitted. Finally, the same process contributes to the spreading uniformity of economic life. Since economic procedures are objectively selected for their maximum serviceability in the achievement of certain ends, the fact that the ultimate aim is the same wherever capitalism prevails explains the increase in similarity of these economic procedures along with the development of economic rationality.

THE CAPITALISTIC ENTREPRENEUR. *The Ideal Entrepreneur* combines the traits of inventor, discoverer, conqueror, organizer and merchant. He is an inventor not so much of technical innovations as of new forms of organization for production, transportation and marketing. Moreover, the entrepreneur as inventor does not terminate his activity with the formulation of the invention; in utilizing it he improves and vitalizes it in countless ways. The discoveries of the entrepreneur are in the realm of new outlets for his products, whether these be new territories or new layers of demand in areas already exploited. The entrepreneur is a conqueror in that he overcomes all obstacles and is courageous enough to take great risks for the success of his enterprise.

In his capacity as organizer the entrepreneur unites many individuals in a common and effective endeavor and so manages human beings and inanimate objects that he wrests from them the maximum productivity of which they are capable. To achieve such results the organizer must in the first place be a keen judge of human potentialities; he must be capable of selecting from a great number of people those best adapted to his particular needs. He must also have mastered the art of shifting responsibility, in part, to subordinates and of advancing those who, with the expansion of the enterprise, will take over systematically various phases of his own job. In this connection the gradual crystallization of the less important functions of the executive and their assignment in the course of years to a directorate, as accomplished by Alfred Krupp, must be regarded as a particularly distinguished example of functional separation and delegation. Similar problems are encountered in the organization of factory personnel. After the services of a promising worker are secured, he must be systematically trained and then assigned to a task which will develop his maximum serviceability. The entrepreneur must attend to the proper organization of groups of persons set to work together and, if there are several such

units, he must establish the best possible relations between them. It would be erroneous, however, to consider that business and factory involve merely the clever choice of technically most advantageous nuclei for grouping men and materials. Special geographical, ethnological, commercial and other conditions must be taken into account in making such selections. The organization which is relatively best is practically more important than the absolutely perfect one.

The entrepreneur as merchant is not merely a specialist in the buying and selling of goods, for the term merchant is here employed to designate one who is charged with definite functions in the capitalistic system. There are professional traders who are indeed anything but merchants; and those who go out "in search of wealth" and of whom our historians tell such an edifying tale are in most cases no merchants at all. Trading or merchandising may imply a number of very different things. It may cover such activities as the equipping and arming of ships, the recruiting of warriors, the conquest and pillage of new lands, the loading of the booty on ships and the sale of it at home to the highest bidder at public auction. Or it may mean the purchase of an old suit of clothes after clever spying upon a gentleman in dire need of money who resisted previous offers to sell it, and its sale to a country yokel who is eventually persuaded by the eloquence of the seller. Trading may also mean security speculation. Obviously the specific differentia of the merchant vary from case to case. Thus in the precapitalistic period to trade on a grand scale, as did the "royal merchants" of the Italian and German commercial cities, one had to be above all an adventurer, combining the traits of discoverer and conqueror. Yet to be a merchant in our sense of the term—the functional rather than the occupational sense—is to conduct a lucrative business, to combine the activities of calculation and negotiation. The merchant is a shrewd, speculating calculator and a persuasive negotiator.

As a calculator the merchant must conduct profitable transactions, buy cheap and sell dear, whatever the object of purchase and sale. Thus, assuming a fully developed enterprise, he must purchase the material and personal factors of production at the lowest price; in the process of production proper he must be continually on the lookout for the most economical employment of these factors; later he must sell the finished product, or whatever else he may have

to sell, on the most advantageous terms to the person who can pay most in the best of the seller's markets when demand is greatest. To master these tasks he must be able to "speculate" and to "calculate." To speculate, in this sense, is to draw correct conclusions applying to the individual case from the evaluation of the total market situation. It necessitates a correct economic diagnosis. It implies a survey of all facts bearing upon the market and the recognition of their true interrelations, an accurate estimate of the significance of individual events, a correct interpretation of certain symptoms, a precise anticipation of future possibilities and finally the selection with a sure grasp of the one most advantageous combination out of a hundred possible ones. To do this the merchant must be able to see with a thousand eyes, to hear with a thousand ears, to feel with a thousand antennae. Here he discovers needy gentlemen or warlike states and offers them a loan at the right moment; there he unearths a heretofore unexploited group of laborers who will work for a few cents less. In one case it is a question of gauging the sales possibilities of a new article and in the other of accurately estimating the influence of a political event upon the temper of the stock market. The merchant's ability immediately to translate all his observations into monetary terms, confidently to combine the thousand separate figures into an integral estimate of the chances of profit and loss, reflects his qualities as a "calculator." And if he be master of the art of instantly reducing every phenomenon to a figure in his ledger he is a "wonderfully shrewd calculator."

In order to succeed the merchant must have not only the sure instinct for a lucrative transaction; he must also be able to carry the transaction through by negotiation. The capacities required resemble those of a skilful mediator between two conflicting parties. For negotiation implies the power to persuade one's opponent, by advancing arguments and refuting objections, to accept a certain proposal. Negotiation is a bout with intellectual weapons. The negotiations carried on by a merchant have to do with the sale or purchase of goods, whether these be shares of stock, a business unit or a loan. Bargaining in this sense covers the case of a petty peddler who higgles with the cook over a rabbit skin and that of the old clothes man who spends an hour talking the country huckster into buying a pair of pants. Yet it also applies to Nathan Rothschild, when under particularly

complicated circumstances he closed a million dollar loan with the Prussian negotiators in a conference that lasted several days, to the representatives of the Standard Oil Company when they conferred on a general rate agreement with the railroad companies of an entire country, and to Carnegie and his men when they discussed with J. P. Morgan and his associates the taking over of the Carnegie plants valued at hundreds of millions. The striking differences between these cases are purely quantitative; the core of the matter remains the same whether the interests involved are measured in millions or pennies. The essence of all modern trading is negotiation, which need not always be verbal or carried on in person. It may be silent as in the case of a seller who by resorting to all sorts of advertising devices succeeds in impressing upon the public the merits of his wares. This is truly a modern example of "silent trade."

Ever present is the problem of convincing the buyer or the seller that the bargain will be to his advantage. The ideal of the seller is realized when an entire population comes to consider as vitally important the purchase of the article which he is advertising, when a panic seizes the mass of the people who fear that they have missed their opportunity to buy (as in times of feverish excitement in the stock market). To arouse interest, to gain confidence, to stimulate the impulse to buy—this is the climactic accomplishment of an effective trader. The way in which he achieves such results is immaterial; it is sufficient for our purposes to know that not physical but merely psychic compulsion is used, that the other party enters the agreement of its own resolve and not against its will.

The Entrepreneur in the Period of Full Capitalism. During the period of full capitalism, which covers approximately the period from 1750 to 1914, the position of the entrepreneur was materially changed in several respects. In the first place, several important tendencies affected the character of entrepreneurial activity. One of these was the tendency to dissociate capital ownership from executive management. The movement away from single ownership or partnership to corporate ownership was paralleled in the substitution of the hired executive for the owner entrepreneur.

Another tendency was that toward increasing functional specialization in entrepreneurial activity. This tendency manifested itself above all in the progressive emergence of the entrepreneur per se, stripped of all subsidiary functions.

This process, the beginnings of which may be discerned even in the early capitalist era, was now approaching completion. General supervision, improvement of technique, office organization and other duties with which the entrepreneur originally had to concern himself came to be cared for by specialists in his employ. Even the question as to whether a certain business proposition would pay, the calculation of probable costs and profits, was delegated by entrepreneurs to special functionaries, the "efficiency experts." Within this more and more narrowly circumscribed sphere of entrepreneurial activity individuals began to concentrate more intensively in certain fields: the banks developed specialists for contacts with industry, for the flotation of stock issues, for the improvement of deposit banking; industry demanded specialists in plant organization, in purchasing and marketing, in financial management.

At the same time, however, there was also a tendency toward the integration of functions. There appeared a limited number of universal super-entrepreneurs who combined banking and industrial power. The most popular road to such comprehensive activity was simultaneous membership in boards of directors of several corporations.

The spiritual adjustment of the entrepreneur to this change in the character of his activities took the form of a differentiation among entrepreneurs on the basis of mental type, range of interests and effectiveness in varying environments. We may distinguish among them three different types: the expert, the merchant or the business man, and the financier.

The expert centers his interest in his particular product. He is definitely tied down to a single branch of production, as is seen most clearly in the case of the entrepreneur who is also a technical inventor. The inventor-entrepreneur aims to bring about widespread adoption of his invention by producing on as large a scale as possible. Plant organization is his major concern, and his chief objective is to procure and make the best use of the proper working forces. Of the three markets—for capital, for labor and for finished product—the labor market is the one in which he is primarily interested; and of the three possible kinds of competition he prefers the competition in service.

The merchant's starting point is the market demand; he is determined to supply the products which he considers most saleable. Anticipating future demand, which he stimulates with clever

propaganda, the ideal merchant creates wants and proceeds to supply the means for their satisfaction. The commodity market rather than the labor market is the main field of his activity, and his important contribution is not organization of the plant but improvement of the sales mechanism. He uses the power of suggestion as his weapon in the competitive struggle.

The financier's important activity is the creation and accumulation of capital by technical manipulations in the stock market. His appropriate milieu is the capital market and his creative powers are expressed in the promotion of new companies or mergers, holding companies and other financial aggregations. His tendency is towards competition of power.

Logically these three types—expert, merchant and financier—represent successive stages of increasing intangibility, of a progressive loss of concreteness in entrepreneurial activity. In a certain sense they follow also a historical sequence. The expert is more a product of early capitalism than of fully developed capitalism, when the other two types appear more and more frequently. The financier becomes really important only after the process of concentration has overtaken that of economic expansion. It must be understood, however, that these ideal entrepreneurial types are seldom encountered in real life. The actual entrepreneur is often a combination of two of these types, generally of expert and merchant or of merchant and financier. It is equally obvious that the demands made upon the entrepreneur and consequently the opportunities offered to each of these types differ in different branches of business. Industries requiring great mechanical precision in the manufacturing process are fertile soil for the expert; the merchant thrives in industries dominated by mass production; and the financier exploits such opportunities as the promotion of new railways.

Something must be said also of the social and national origins of the entrepreneurial class in the period of full capitalism. This period is characterized by an increasing democratization of its economic leadership: entrepreneurs are drawn from a continually growing number of social groups, and in the course of time lower and lower strata of society are tapped for this purpose.

Statistics for a sample of the English cotton industry before the war (Chapman, S. J., and Marquis, F. J., "The Recruiting of the Employing Classes from the Ranks of the Wage-Earners in the Cotton Industry" in Royal Statistical

Society, *Journal*, vol. lxxv, 1911-12, p. 293-306) offer an apt illustration of the process of democratization. Of 63 manufacturers engaged in the cotton weaving industry, 48 belonged to the "first generation," that is, they were "employers, managers and others . . . , who have themselves risen from the operative classes or from classes earning no more than operatives." In an industrial city of 100,000 inhabitants, 139 employers who owned 93,400 looms replied to questionnaires. Of these 88 were of the first generation; they owned 49 per cent of the looms while the other private employers owned 44 percent of the looms, and corporations accounted for the remaining 7 percent. In the cotton spinning industry dominated by corporations entire boards of directors were questioned; of 45 directors who replied, 33 belonged to the first generation. In addition, among 45 of the mill managers who responded, 38 were of the first generation. In a special investigation dealing with 20 cotton mills in a cotton center it was found that the first generation included 13 percent of the managing directors, 42 percent of the managers (salary range £200-£800) and 67 percent of the assistant managers (salary range £100-£150).

Even many of the great industrial leaders of our day have risen to their high positions from very humble beginnings, as is evidenced in their biographies which are at present in vogue. A number of German business giants came from the middle class of lower social strata and began their careers in subordinate positions. Ballin was an emigration agent; Bosch, the son of a peasant, had an initial capital of 10,000 marks; Dernburg and Helfferich came of families of scholars; Deutsch was the son of a cantor; Fürstenberg's first position was that of a clerk. After his father's fortune was lost Kirdorf began as commercial manager of a small colliery; Isidor and Ludwig Löwe were the children of a grammar school teacher; Emil Rathenau was an engineer in modest circumstances; and Werner Siemens, an artillery lieutenant, founded his plant for the manufacture of telegraphic equipment with a borrowed capital of 6000 talers. Jandorf, Tietz and Wertheim, the founders of the large department stores, began as petty shopkeepers in the provincial cities in eastern Germany. In the United States the number of magnates who have risen from the ranks is perhaps even larger: Carnegie was the son of a poor Scottish weaver, Ford the son of a small farmer and Harriman the son of a minister in a poor Long Island parish.

The reasons for the democratization of the entrepreneurial group are fairly obvious. During the entire period of early capitalism it was necessary either to be wealthy or to affiliate with the possessors of wealth in order to acquire the capital necessary for a start in business. Consequently there must have been many cases in which one man had entrepreneurial ability and no money, and another money but no ability or inclination to engage in business. In the period of full capitalism the man of wealth can easily employ his money as capital without himself being an entrepreneur, and the impecunious man can more easily procure capital by floating stock or borrowing from a credit institution. "Credit institutions are the props of genius," observed the *Bremer Handelszeitung* in 1856; it is primarily the credit system that makes it possible for a man without capital to be active as an entrepreneur.

No less important is the change in the national composition of the entrepreneurial class. While in the period of early capitalism the center of gravity of economic life was found in the Romanic countries, industrial leadership in the period of full capitalism shifted to the nations of Germanic origin. Thus in the year 1910-11 the joint share (in percent) of Germany, Great Britain and the United States in the world's output of the most important raw and semi-manufactured materials was as follows: zinc 65, lead 71, crude oil 71, copper 76, steel 78, pig iron 79, cotton 80, cotton yarn (number of spindles) 75, coal 82 and coke 84.

It is worth noting also that in all countries the Jews have been capturing a growing share in economic leadership. Although the Jews constituted only about 1 percent of the general population in pre-war Germany, 13.3 percent of the directors of industrial enterprises were of Jewish origin. This percentage was as high as 23.1 in the electrical industry, 25 in the metal industries and 31.5 in the leather and rubber industries. 24.4 percent of the members of supervising councils (*Aufsichtsräte*) in industrial corporations were Jews. They played an even more important part in the management of the banks, which were largely controlled by Jews. There was a similar preponderance of Jews in the large scale retail business: most of the department stores, which in Germany are practically all organized on the Tietz system, were established by Jewish merchants. While these data relate to Germany only, what is true of Germany applies to some extent to all capitalistic countries.

The Importance of the Personal Element in the Capitalistic Economy. It would be erroneous to assume, as is done so frequently, that because of the dominance of the impersonal entity, the capitalistic enterprise, the personality of the capitalistic entrepreneur is submerged and reduced to insignificance. It is true that the prime mover in the economic process has now become the automatic, highly efficient contrivance unrestricted spatially or temporally and unhindered by any personal or organic limitations. The individual, even the individual entrepreneur, inevitably becomes a part of it. The earth is studded with countless factories organized on an identical plan and equipped with machines of delicate precision—all this for the purposes of profit making. Chance, individual and national differences are eliminated. Necessity, uniformity and homogeneity dominate in this quantitative universe. Yet it must not be supposed that the importance of the human personality is debased in this mechanized world. On the contrary, the individual, if he happens to be outstanding, wields in the economic life of this period an influence far surpassing that of any other age.

Although the categories of striving and action are a necessary part of any abstract conception of the universe, the concrete fact remains that something positive must be striven for and something tangible must be done. If modern economic rationalism is like the mechanism of a clock, someone must be there to wind it up. If the capitalistic enterprise tends to become an ever larger and more complicated machine, still it does not dispense with the need for a human being to tend it; and the more complicated the machine, the more intelligent he must be. The government and the army have developed along similar lines; there too we find a gigantic mechanized apparatus, and yet a leader is more than ever indispensable. It is true, however, that the distribution of forces has changed; a central power station—the leading executive—has superseded, at least in the large business units, the great number of smaller ones.

The Russians grasped less than any other nation the peculiar character of the capitalistic economy when they banished the capitalistic entrepreneur and thereby brought the entire mechanism to a standstill. The Americans, on the other hand, display the keenest understanding of capitalism. They place a particularly high value upon personality in economic life, considering that in the last analysis it is the individual rather than the business enterprise, family

or capital that is the driving economic force. In the large concerns a few eminent personalities hold undisputed sway. Rumor has it that H. H. Rogers, once the leading brain of the Standard Oil group and president of the Amalgamated Copper Company, remarked that on boards of which he was a member the vote was taken first, and discussion followed only after he had left.

THE PERIODS OF CAPITALISM. An economic epoch is the stretch of time during which an economic system is actually realized in history. While every economic system appears first within the framework of another, there are some periods during which economic processes reveal in a comparatively pure form the features of a single economic system. These are periods of the full development of the system; until they are reached the system is going through its early period, which is also the late period of the disappearing or retreating economic system. Applying to capitalism this division into epochs, we may distinguish the periods of early capitalism, full capitalism (*Hochkapitalismus*) and late capitalism.

In the period of early capitalism, which lasted from the thirteenth to the middle of the eighteenth century, economic agents, the capitalistic entrepreneurs, and their subordinates, the workmen, still bear the earmarks of their feudal or handicraft origin; their economic outlook still exhibits the superficial characteristics of pre-capitalist mentality. The economic principles of capitalism are still struggling for recognition; traditionalism and the mediaeval idea of working merely for a livelihood still predominate. Likewise the external aspects of economic life frequently resemble those of the earlier period: home industry still prevails; the output of factories and manufactories is still slight; the technology employed is not very far from the traditional rule of thumb. Economic life in general has a decidedly personal cast; the individual and his personal concerns frequently form the center of interest, and the relations between individuals are still for the most part on the old personal basis. In commercial transactions buyer and seller confront each other in person and let their personal likes and dislikes affect their business deals; within the enterprise the employer and workmen are often held together by a personal bond ("patriarchal industrial relations").

In the period of full capitalism, which closed with the outbreak of the World War, the principles of profit and economic rationalism attain complete control and fashion all economic rela-

tionships. The scope of economic activity is enlarged (expansion of markets, increase in the size of business units and plants) and scientific, mechanistic technology is widely applied. It is particularly characteristic of this period that relations which originally involved unmediated actions by living persons are now institutionalized; a system of man made organization eliminates spontaneous contact and forces individual action into a framework imposed from the outside. Thus the relation between seller and consumer loses its personal character in a large retail concern where purchases are made almost mechanically with virtually no human contact (system of fixed prices). The standardization of merchandise and the increasing uniformity of the terms of sale on the basis of established usage (as in the dealings in futures) make the wholesale business quite impersonal. The loss of adaptability to individual differences in factory management takes the form of the standard labor contract. Credit relations are no longer based on personal acquaintance between creditor and debtor; credit transactions are regulated by fixed norms and the credit instrument is completely standardized. The use of negotiable securities—endorsed promissory notes and bills, banknotes, evidences of debt guaranteed by mortgage, bonds and stocks—by means of which it is possible at a moment's notice to introduce into the situation new creditors unknown to the original debtor, impersonalizes and objectifies the credit relation.

Most intimately connected with this tendency toward mediatization and mechanization is the intensified commercialization of economic life, the debasement of all economic processes into purely commercial transactions or at any rate the subordination of their other constituent elements to the commercial one. This is vaguely expressed by such a phrase as "the domination of business by Wall Street," in which we can substitute for Wall Street the name of the central speculative-financial market of any country. This is made possible primarily by the depersonalization of credit relations and their crystallization in transferable, marketable, liquid credit instruments.

The period of late capitalism, upon which we are at present entering, can be best characterized by describing the changes which capitalism has been undergoing in the past decade. We observe first of all that industrialism is spreading to every corner of the world; the hard and fast division and the resulting peculiar relations between in-

dustrial and agrarian countries, both of which were characteristic of the period of full capitalism, are being gradually worn away. In industrial countries the strength of the specifically capitalistic elements of economic life is declining; "mixed" public-private undertakings, state and communal public works, cooperative enterprises and other forms of non-capitalistic economic endeavor increase in number, size and importance. The most important changes, however, concern the internal structure of capitalism.

The economic outlook has recently undergone material changes and will continue to change in the future. The capitalistic spirit at its prime was characterized by psychological strains of peculiar intensity born of the contradictions between irrationality and rationality, between the spirit of speculation and that of calculation, between the mentality of the daring entrepreneur and that of the hard working, sedate bourgeois. At present this strain is relaxing. Rationalism is thoroughly permeating the capitalist spirit, and a completely rationalized mentality is no longer a capitalist mentality in its characteristic sense. Certain special aspects of this change are worthy of mention.

All the differentia of a genuinely entrepreneurial spirit—daring decision, intuitive judgment, instinctive grasp of a situation—become less and less important in the conduct of business. The number of determinable factors is constantly increasing, and the entrepreneur is more and more disposed to build his business upon the foundation of systematized knowledge. This may already be observed in the United States, although only beginnings are discernible in Europe. The budgeting of production, of financial needs, the systematic mapping out of sales campaigns—practices which become increasingly common—represent nothing less than the management of a business in accordance with a system of knowable facts. When such practices are perfected and carried to their logical conclusion, the concern in which they are relied upon ceases to be capitalist in spirit and resembles a public undertaking with a thoroughly systematized and externally regulated management. The manager of such an enterprise resembles a minister of finance, who has to act within a framework imposed upon him from the outside.

It is psychologically plausible that with the increase in the size of the business unit the striving for profit grows less intense; witness such symptoms as the fixed dividend rate, the

reinvestment of surplus—in the United States, for example, some concerns provide from 30 to 35 percent of their new capital in this way—the creation of reserves and similar arrangements. Connected with this is the disappearance of the recklessness, daring and aggressiveness of the typical entrepreneur of old. These qualities are paralyzed and fall into disuse with the spread of cartels and trusts and other manifestations of the tendency toward concentration. It is possible that there is a general tendency to gradual decay of the entrepreneurial mentality.

The form of economic life and its objective order are also changing: freedom from external restraint characteristic of the period of full capitalism is superseded in the period of late capitalism by an increase in the number of restrictions until the entire system becomes regulated rather than free. Some of these regulations are self-imposed—the bureaucratization of internal management, the submission to collective decisions of trade associations, exchange boards, cartels and similar organizations. Others are prescribed by the state—factory legislation, social insurance, price regulation. Still others are enforced by the workers—works councils, trade agreements. The relation between employer and employee becomes public and official. The status of the wage worker becomes more like that of a government employee: his activity is regulated by norms of a quasi-public character, the manner of his work approaches that of a civil servant (no overtime), his wage is determined by extra-economic, non-commercial factors. The sliding wage scale of earlier times is replaced by its antithesis, the living wage, expressing the same principle as that underlying the salary scale of civil servants; in case of unemployment the worker's pay continues, and in illness or old age he is pensioned like a government employee. At present this situation is more characteristic of a country of older culture like Germany, but it is bound to become established also in the United States.

The economic process as a whole has changed also. What used to be a matter of spontaneous, natural development is fast becoming a system of external regulations. By and large, flexibility is being replaced by rigidity. Thus regulation of economic life through the market mechanism, a system under which the links of the causal sequence were demand and supply, market conditions, prices of goods, wages, profits, is gradually disappearing. It is being superseded by the price regulation of combinations or even

of the government; by wage regulation of the trade unions, who pay little attention to the market conditions; by indirect regulation of the geographic distribution of industry through the intervention of the central and local governments, who disregard the natural rationality implicit in the existing situation.

The cyclical oscillations of the economic system, the rhythm of prosperity and depression characteristic of full capitalism, also become attenuated. A large number of considerations bear upon this change. There is an increasing insight into market conditions and the factors determining them. The currency and credit system has been rationalized, better adapted to serve the needs of the existing order. Conditions of production were affected by important changes in the supply of factors of production; thus, while the economic cycles of the past eighty years were conditioned by railroad building and the introduction of electricity, at present the supply of important equipment has reached the saturation point; business has assumed the corporate form of organization, and there has taken place a concentration of economic power; the reserve army of the unemployed has been reduced by a general decrease in excess population. There is more external regulation of business by government (regulation of the promotion of new enterprises, labor legislation) and by labor organizations. The entrepreneurial group has been consciously striving for stability as in the cartels and trade associations. Public authorities have intervened to offset the business fluctuations by withholding orders in periods of prosperity and granting them more generously in periods of depression; this policy will play an increasingly important role. "Stabilization of business" seems to be both the slogan and the accomplishment of this period.

WERNER SOMBART

See: ECONOMIC ORGANIZATION; COMMERCE; GUILDS; INDUSTRIAL REVOLUTION; PUTTING OUT SYSTEM; FACTORY SYSTEM; BUSINESS; INDUSTRIALISM; SOCIALISM; COOPERATION; EVOLUTION, SOCIAL; ECONOMIC HISTORY; ECONOMICS; PROPERTY; CONTRACT; CAPITAL; CORPORATION; ACQUISITION; PROFIT; COMPETITION; LAISSEZ FAIRE; LIBERALISM; ENTREPRENEUR; CAPTAIN OF INDUSTRY; BUSINESS ADMINISTRATION; BUSINESS ETHICS; EFFICIENCY; RATIONALIZATION; INVENTION; MACHINES AND TOOLS.

Consult: Sombart, Werner, *Der moderne Kapitalismus*, 3 vols. (Munich 1921-27, vols. i-ii, 4th ed.), and *Die Juden und das Wirtschaftsleben* (Leipsic 1911), tr. by M. Epstein as *The Jews and Modern Capitalism* (London 1913), and *Der Bourgeois* (3rd ed. Munich 1923), tr. by M. Epstein as *The Quintessence of*

Capitalism (London 1915), and *Die Ordnung des Wirtschaftslebens*, Enzyklopädie der Rechts- und Staatswissenschaft, Abteilung Staatswissenschaft, no. 35 (Leipsic 1925); Passow, Richard, "Kapitalismus"; eine begrifflich-terminologische Studie (2nd ed. Jena 1927); Pohle, L., "Kapitalismus" in *Handwörterbuch der Staatswissenschaften*, vol. v (5th ed. Jena 1923) p. 584-602; Below, Georg von, *Probleme der Wirtschaftsgeschichte* (Tübingen 1920) p. 399-500; Hobson, John A., *The Evolution of Modern Capitalism* (new ed. rev. London 1926); Gerlich, Fritz, *Geschichte und Theorie des Kapitalismus* (Munich 1913); Commons, John R., *Legal Foundations of Capitalism* (New York 1924); Weber, Max, "Die protestantische Ethik und der 'Geist' des Kapitalismus" in *Gesammelte Aufsätze zur Religionssoziologie*, 3 vols. (2nd ed. Tübingen 1922-23) vol. i, tr. by Talcott Parsons (London 1930); Tawney, R. H., *Religion and the Rise of Capitalism* (London 1926); Dobb, Maurice H., *Capitalist Enterprise and Social Progress* (London 1925); Palewski, J. P., *Le rôle du chef d'entreprise dans la grande industrie* (Paris 1924); Pinner, Felix, *Deutsche Wirtschaftsführer* (Charlottenburg 1924); Moody, John, *The Railroad Builders*, and *The Masters of Capital*, Chronicles of America series, vols. xxxviii and xli (New Haven 1919); Hilferding, Rudolf, *Das Finanzkapital*, Marx-Studien, no. 3 (Vienna 1910); Veblen, Thorstein, *Absentee Ownership and Business Enterprise in Recent Times; the Case of America* (New York 1923); Meakin, Walter, *The New Industrial Revolution; a Study for the General Reader of Rationalization and Post-War Tendencies of Capitalism and Labour* (London 1928); *Strukturwandlungen der deutschen Volkswirtschaft*, ed. by B. Harms, 2 vols. (Berlin 1928); Liberal Industrial Inquiry, *Britain's Industrial Future* (London 1928).

CAPITALIZATION may designate either the process of capitalizing a flow of money income or the par value aggregate of shares of capital stock and of certificates of long term indebtedness issued to those who contribute money or other forms of wealth to a corporation for use as its capital fund. Capitalizing the flow of income is one way of determining the capital value of the income yielding object. The problems arising in this connection are an integral part of the general questions as to the nature of capital (*q.v.*) and interest (*q.v.*) and the psychological bases of market valuation (see VALUATION). The capitalization of an enterprise involves on the other hand problems in financial management.

One of these problems concerns the relation of capitalization to the actual cost of assets and to present and prospective net income. Were the assumptions of orthodox economic theory fulfilled and the cost of productive assets equal to the capitalized value of their income yield, no important practical issue would center about this question. In that case it would not be

CHANG CHIH-TUNG (1837-1909), Chinese statesman. He entered public life in 1863, and in 1884 as viceroy in Kwangtung during the Franco-Chinese War he argued against China's responsibility to France for damages to Chinese Christians. In 1898, after the Japanese war had awakened and perplexed Chinese opinion, he suddenly attained leadership of the moderate liberals by his brilliant, widely read and influential essay, *Learn* (abr. tr. by S. I. Woodbridge as *China's Only Hope*, New York 1900), in which he urged China to avoid India's fate and to follow Japan's example by learning from the West how to develop the elements which gave those nations strength: governmental efficiency, modern armies and navies, factories, mines, railways, schools, the press. Some of these he had already introduced in his domain of Hukwang. Because of his conscientious opposition to democratic institutions and his belief that the Confucian foundations of Chinese statecraft should be conserved by more complete centralization under the Manchu dynasty, he refused to join K'ang Yu-wei and the emperor in their program of drastic reforms (1898). When the empress dowager's coup and the Boxer reaction resulted from the premature reform decrees he begged the empress dowager to withhold support from the Boxers and during their fanatical outbreak he maintained order and protected foreigners in central China. Although Chang continued in office after this disastrous rebellion his mild progressiveness—now no greater than that of the court—appeared as conservatism, since radicalism and even revolution were being preached by Dr. Sun and by growing numbers of students who had returned from Japan.

WILLIAM JAMES HAIL

Consult: Morse, H. B., *The International Relations of the Chinese Empire*, 3 vols. (London 1910-18) vols. ii-iii.

CHANG HSÜEH-CH'ENG (Shih-chai) (1738-1801), Chinese historian. He was born in Kueichi, Chekiang province, and was the most creative writer on historical method and on the theory of history that China had produced since the time of Liu Chih-chi (661-721 A.D.). His two outstanding works are the *Wen Shih T'ung I* (General interpretation of literature and history) and the *Chiao Ch'ou T'ung I* (Principles of textual criticism).

In his treatment of the origin and technique of Chinese historical scholarship Chang Hsüeh-

ch'eng advocated, far in advance of his time, a genetic view of history in which the fixed categories of former historians are discarded and the form adapted to the materials rather than the materials to the form. For this reason he favored the topical rather than the chronological or dynastic treatment of history. He held that the qualifications of a great historian are talent, training, sound judgment and historical veracity and that a true history should show understanding, be faithful to the facts and have literary form. He believed, moreover, that not only the canonical books but all records of the past, such as biographies, edicts, laws, official documents, should be considered as materials for the historian, thus greatly enlarging the scope of Chinese history. In urging the establishment of centrally located libraries, under government supervision, where the rare materials of history could be preserved, classified, collated and conveniently indexed, and so made available to those who wish to ascertain the facts, he anticipated the public libraries of our day. He advocated a radical revision of the categories of local histories and stressed their importance to Chinese historians at a time when these were not regarded as works of history.

ARTHUR W. HUMMEL

Consult: Hu Shih, *Chang Shih-chai Hsien-Sheng Nien-p'u* (Shanghai 1922), and a review of the same by P. Demiéville in *L'école française d'extrême orient, Bulletin*, vol. xxiii (1923) 477-88.

CHANGE, SOCIAL. As a term carrying a definite scientific connotation, social change has come into use only recently. The concept bears a certain relation to the somewhat earlier ones, social evolution and progress. Social evolution had come to be identified fairly closely with the dogma of inevitable successive stages of development based on biological determinants; and progress usually implied a faith or borrowed standards from current morals. The need for a term free from dogmatic or moral implications explains the present day preference for the expression social change, which suggests to most readers objective description and an absence of implied values.

A first point of difference between theories of social change and the conventional theories of social evolution turns on the question, what is it that changes? Climate changes but slowly and over long periods of time. So, too, the greater proportion of a race of men appears to remain pretty much the same, although this point is still

disputed. During the historical period changes in climate or in inherited biological nature are at least slight in comparison with other changes, so slight that they are generally neglected as causal factors in the social changes of history.

What does change is culture, or the social heritage. Culture is that part of our environment for which animals living in the wild state do not have a counterpart, although some wild animals have the crude beginning of a culture. Some factors in culture do indeed show great capacity for maintaining themselves unchanged, but the system of culture as a whole may exhibit almost revolutionary changes, even within a single generation.

The key to change may be sought in invention. The word as here used means any new element in culture—a much broader meaning than the term commonly conveys. For culture as a whole the force making for change is the creation of an invention. For a particular culture area social change is due to an invention either made in that area or else imported into it. To understand social change it is necessary to know how inventions are made and how they are diffused.

Inventions are combinations of existing elements of a culture into a new form, as, for instance, the telegraph. Not all of the elements in question are material elements; some of them may be principles or ideas. There is at any one time a current stock of ideas just as there is a current stock of material objects. Thus there is the idea of rapid communication which is an element in the invention of the telegraph. Ideas that are pressed on the attention are one phase of demand or "necessity," long recognized as the mother of invention. Demand or necessity naturally cannot produce inventions unless there are in existence the materials out of which the inventions can be made. Primitive man had serious need of scientific medicine but made few discoveries in this field. There seems to be sufficient demand or necessity at all times to produce social change.

Inventions, being useful, tend to accumulate. They sometimes result in the substitution of a new form for an old one. If the old form is completely supplanted there has been no accumulation in this particular instance. This may often happen in a restricted area. The grain cradle does not persist alongside of the binder, nor do the bow and arrow alongside of the rifle. It is less frequently the case that a new form substitutes itself for the old throughout the world.

Most forms ever in use are still in use somewhere. There are still culture areas in which the neolithic technique persists.

The tendency of inventions to accumulate results in an increase in the existing cultural elements which may go to make a new invention, and hence an increase in inventions. The curve of growth of inventions exhibits a similarity to the exponential curve. Accumulation of inventions means not only a greater amount of social change but a more rapid social change. No doubt other factors besides the mere drive of accumulated inventions enter into the group of forces making for new inventions. Necessity is one such factor. One may refer to the part played by necessity in war time in evoking the invention of counter-weapons for each new arm put into successful operation. In the general case, however, demand or need may be taken for granted.

It is the net addition of small elements to culture that makes invention a process. Because this process is continuous social change is continuous. It is believed that in very early times social changes were irregular because of the rareness of invention. In a particular series of inventions such as fire making this may have been true. When, however, a large number of such series are in process simultaneously social changes are more numerous, more frequent and perhaps more regular. Irregularities in the process of social change are also due to the fact that not all new elements of culture or inventions are of the same potency in precipitating changes. Such inventions as the electric motor, the incandescent light, the moving picture and the radio have vastly more capacity to precipitate social change than the flashlight or the cigarette lighter. But whatever irregularities in social change may follow from the casual occurrence of significant inventions, it appears extremely improbable that such irregularities would form a series that could properly be described as a cycle.

What has given rise to the belief that social change proceeds by cycles is the fact that there are certain historical periods of great social change with stretches of time characterized by less activity between them. Such periods, for instance, are the Renaissance and the industrial revolution. These great changes may be due to many factors, as for instance the recovery of classical learning, the opening of new trade routes or new lands for exploitation, or new sources of power of wide application, as for

example the steam engine. In such cases we may say that inventions appear in extraordinary clusters, and we should naturally expect social change to proceed at an unprecedented rate. It is also probably true that the historical perspective exaggerates these changes. History contrasts the Renaissance and the Dark Ages only with respect to art, learning and social organization, but these taken together compose only a small fraction of culture. It is not generally known that there were many important mechanical inventions during the Dark Ages. History indicates periods of quiescence between periods of rapid social change, but this too may be largely a matter of perspective. Granting, however, occasional great irregularities, we should not lose sight of the principle that social change in advanced societies is normally a continuous and even fairly regular process.

Social changes are more numerous now than formerly because the cultural elements are so much more numerous. Although there are other reasons, this is perhaps the outstanding one. Social change among the Eskimos is slow not, it is thought, because they are low in mental ability but because they do not have sufficiently numerous cultural elements to operate with.

Rates of social change differ not only according to the stage of social development but also for the several parts of our social heritage. This heritage may be classified for the present purpose under material objects (together with the immediate processes of their production and use) and non-material culture including social organization, science, art, philosophy, music, painting, sculpture, literature, religion, morals, customs and the like. Observation not, however, established by statistics seems to show the most rapid changes at the present time in material culture and in science and less rapid and less numerous changes in other aspects of non-material culture. It also appears that the accumulative process is at present more active in natural science and material culture. Thus the material and natural scientific part of the cultural base appears to be growing larger more rapidly than the non-material part. If we are justified in assuming a functional relationship between the several parts of the cultural base and the future rate of social change we may forecast increasingly rapid changes in material culture.

If the parts of culture which change at unequal rates were uncorrelated, as the water at the surface and at the bottom of a flowing stream, there would be no problem. But many of the

parts of our social heritage, somewhat like an intricate machine, are closely correlated, and when one part changes the correlated part also needs to be changed. Thus science and religion are correlated, and when scientific discoveries bring new ideas concerning such items as life after death, the immaculate conception, the age of the earth and the early history of man, religion tends to change accordingly, but somewhat later. So also family life adjusts itself to the factory after a lag. A change in the family or in religion may originate from within or it may be forced upon family or church by inventions or discoveries in some other part of culture. Many changes in social life are thus precipitated by changes in the mechanical or scientific culture. Thus the preservation of food in tins or the invention of contraceptives influences the position of woman. At the present time a very large number of initial changes are occurring in the vast volume of material culture, and relatively few changes take their origin from within social life as such. At the present time it is the social life that is compelled to adjust itself to changes in material culture. It is entirely conceivable that the conditions might be reversed and the material culture might be compelled to adjust itself to changes originating in social life. It might be difficult to adduce examples covering a wide culture area, but in limited areas subject to invasion by a foreign culture it is quite possible that non-material culture will be absorbed first and that material culture will be forced to undergo a process of adaptation. So new ideas, new habits, new philosophies, were diffused into the Orient and became precipitators of change as truly as were tools and mechanical devices.

When we pass from culture as a whole to the culture of a particular country we encounter many factors affecting the rate of social change. Most changes are introduced into the particular locality from without. The rate of change is accordingly very slow in isolated islands, deserts or mountainous regions, where there is little intrusion of change from the outside. It would be still slower if change had to wait wholly on invention or discovery within the particular area.

There are various obstacles to the penetration of the factors of social change into a country, even though the barrier of isolation is broken down. Many factors of change are great clusters of inventions. The adoption of the horse meant the adoption of a horse culture. The adoption of the automobile compels the provision of the

services of mechanics, steel, cotton, rubber, gasoline, good roads, filling stations and hundreds of other correlated factors. The area adopting a new factor in culture must have the correlated elements necessary to its utilization. Similarly the successful importation of ideas such as democracy or theories of natural selection is likewise dependent on the presence in society of correlated ideas, which are as real as concrete objects. Some ethnologists claim that the diffusion of material culture is more easily accomplished than the diffusion of non-material culture, but there are certainly many exceptions.

That social changes do not follow immediately upon invention is due not merely to the fact that it takes time for an invention to become known. There are positive resistances to be overcome. Sometimes these take the form of ingrained habits. This seems to be the chief obstacle to the introduction of simplified spelling, the metric system and the thirteen-month calendar. The tenacity of personal habits also accounts for the resistance to changes in language and to the substitution of science for superstition or ignorant tradition in medicine, diet and even agriculture. Often an invention affects only one part of an extensive complex; its application would involve numerous inconvenient and expensive adaptations. The standard gauge of railway track is probably too narrow, but to change the gauge would mean changing the various parts closely related to it, the rolling stock, the stations, dispatching systems, etc. Usually the more closely correlated a part of culture is with other parts the greater is its resistance to change. There is a proverb that every old tax is a good tax and every new tax is an evil. The old tax has been adjusted into the existing complex of business; the new tax may involve a complicated and painful process of readjustment. For the same reason business is impatient of "tariff tinkering," irrespective of the merits of proposed changes.

In an analogous way those who find social life satisfactory as it is are inclined to resist change. They know the rules of the road and can guide their conduct accordingly. Other rules might be inherently better but it would be necessary to live through a period of confusion before the new rules could become equally well known and usable. Persons of status and wealth tend to resist changes that may disturb their reputations, jobs or property. Social institutions seem particularly resistant to change. Thus a pagan

winter festival has persisted under the form of Christmas, taking on Christmas functions but retaining much of its original spirit. Fear of the new and respect for the traditional are change resisting attitudes, as are also the emotional attachments to national leaders, flags, religious symbols, childhood patterns. The home exerts a conservative influence resistant to social changes. If an invention succeeds at all it is by its usefulness, and being useful it is likely to make its way in time, in spite of resistances to the social changes it entails. There are conditions that often greatly facilitate the acceptance of invention and change. Thus countries with increasing incomes appear more ready to take a chance with the new. Money available for contributions and taxation offers a condition favorable to experiment. Some elements in the population are said to be addicts to change. Thus certain neurotic types, having a basic unrest, when exposed to the proper stimuli become an active element in furthering social change. So also social classes with the lowest incomes and whose chance of loss by change is least may become active agents for change, but only when points of contact with ideas of reform or revolution are made. Some psychologists claim that if children are not disciplined too early into social traditions they grow up to become active in promoting social changes that are more in accord with inherited nature than is the existing tradition. Young adults are said to favor change more than elders. A public sentiment placing a high valuation upon originality, invention, research, is conducive to social change.

Periods of great social change are usually characterized by a decline in the authority of codes of morality and by greater dependence on experiment, expediency and rationality in conduct. Similarly it is asserted that such periods are characterized by a deterioration in manners and by the frequent emergence of an uncontrolled egoism. Cultures that have undergone little social change have had time to work out by a long process of trial and error what appear to be the most suitable adjustments of the individual to the culture and the best correlations between the parts of that culture. There is thus said to be a harmonious quality in those cultures which is not found among cultures undergoing great changes. The effect of social change is to raise the questions, what is a properly integrated culture and what is the most satisfactory adjustment of culture to inherited nature? This in turn raises the question of the

values implied in progress. But whether the changes be for better or worse, the study of social changes makes the chances of control and prediction for culture as a whole appear somewhat remote. Invention has not been predicted with success and few social effects of mechanical inventions and scientific discoveries have been foreseen with certainty. With the growth of science more prediction will be possible. Indeed, for a particular area it may be quite possible to predict the introduction of culture elements from outside and the social consequences. In such cases a measure of control would even now be possible.

WILLIAM F. OGBURN

See: CULTURE; SOCIETY; SOCIAL PROCESS; INVENTION; CUSTOM; CONFORMITY; CIVILIZATION; DECADENCE; EVOLUTION, SOCIAL; PROGRESS; ORGANISM, SOCIAL; CONSERVATISM; RADICALISM; REVOLUTION.

Consult: Kroeber, A. L., "The Superorganic" in *American Anthropologist*, vol. xix (1917) 163-213; Lowie, R. H., *Culture and Ethnology* (New York 1917), and *Primitive Society* (New York 1920); Ogburn, W. F., *Social Change* (New York 1922); Chapin, F. S., *Cultural Change* (New York 1928); Hobhouse, L. T., *Social Development* (London 1924); Müller-Lyer, F., *Phasen der Kultur* (Munich 1908), tr. by E. C. and H. A. Lake as *History of Social Development* (London 1920); Wissler, Clark, *Man and Culture* (New York 1923); Ellwood, C. A., *Cultural Evolution* (New York 1927).

CHANNING, WILLIAM ELLERY (1780-1842), American clergyman. Channing became pastor of the Federal Street Church, Boston, in 1803 and remained its minister until his death. Although he is remembered today chiefly as a leader of Unitarianism he was not primarily interested in theology, and in his own time was important as a social reformer and man of letters. His aim was always religious and moral regeneration, but he proposed such practical innovations as a bakehouse for the poor, a society to advise immigrants and a fund for the ill and unemployed. An active worker in the various reform societies of Boston, he wrote on behalf of liberty of speech, temperance, prison reform, the limitation of child labor and the better treatment of apprentices. He was especially interested in the elimination of war, though he was not an absolute pacifist, and in the extension to all classes, to adults as well as children, of improved educational opportunities. During the last decade of his life he wrote several pamphlets against slavery. Underlying all his views on social problems was his faith in human perfectibility and human dignity. If this

faith led him to emphasize self-reliance and to base his hope for reform on the regeneration of the individual, it also helped to make him friendly toward the utopian dreams of his younger contemporaries. He advised and encouraged George Ripley, Theodore Parker, James F. Clarke, Horace Mann and others, and through this personal influence, as well as through his writings, he affected the social thought of the twenty years prior to the Civil War.

GRANVILLE HICKS

Works: *The Works of William Ellery Channing*, 6 vols. (Boston 1841-43; new ed. in 1 vol., Boston 1886).

Consult: Channing, W. H., *Memoir of William Ellery Channing*, 3 vols. (6th ed. Boston 1854); Chadwick, J. W., *William Ellery Channing, Minister of Religion* (Boston 1903); Spiller, R. E., "A Case for W. E. Channing" in *New England Quarterly*, vol. iii (1930) 55-81.

CHANNING, WILLIAM HENRY (1810-84), American clergyman, nephew and biographer of William Ellery Channing. He was an active worker in the movements for peace, temperance, women's suffrage and the abolition of slavery. Influenced by Fourier's writings, he called himself a socialist, but his social views were, like his uncle's, based upon religious conceptions. Despite his affiliation with the Unitarians Channing wished to disregard creeds and to make social idealism the basis of the church. To this end he organized a creedless church in New York in 1843, and in 1847 founded in Boston the Religious Union of Associationists. After 1854 most of his life was spent in England. He wrote for the *Dial* and the *Phalanx*, and edited the *Present* (1843-44) and the *Spirit of the Age* (1849-50). He was interested in and influenced the development of the North American Phalanx, Brook Farm and the Raritan Bay Union. Although he criticized Fourier as deficient in the Christian spirit of love, his writings and lectures served to disseminate Fourieristic ideas.

GRANVILLE HICKS

Consult: Frothingham, O. B., *Life of William Henry Channing* (Boston 1886).

CHAPTAL, JEAN ANTOINE (1756-1832), French chemist and economist. He was professor of chemistry at the University of Montpellier and afterwards at the École Polytechnique. In 1798 he became a member of the Institut. As minister of the interior under Bonaparte and as director general of commerce and manufactures, and later as minister, under

socialistic and was concerned primarily with the application of the social gospel to immediate industrial and social problems.

At the present time the movement for Social Christianity, as led by Harry F. Ward, Bishop Francis J. McConnell, John Haynes Holmes and others, shows the definite influence of the earlier protagonists of Christian Socialism.

VIDA D. SCUDDER

See: SOCIAL CHRISTIANITY; SOCIALISM; COOPERATION; CHRISTIAN LABOR UNIONS; CATHOLIC PARTIES.

Consult: FOR GREAT BRITAIN: Raven, C. E., *Christian Socialism 1848-1854* (London 1920); Brentano, L., *Die christlichsoziale Bewegung in England* (2nd ed. Leipsic 1883); Beer, M., *A History of British Socialism*, 2 vols. (London 1919-21) vol. ii, ch. ix; Woodworth, A. V., *Christian Socialism in England* (London 1903); Noel, Conrad, *Socialism in Church History* (London 1910); Gore, Charles, *Christ and Society* (London 1928); Headlam, Stewart D., *The Socialist's Church* (London 1907); *The Return of Christendom*, by a group of churchmen with introduction by Bishop Charles Gore (London 1922).

FOR THE UNITED STATES: *Essays in Intellectual History*, dedicated to J. H. Robinson (New York 1929) ch. viii; Jacobs, Leo, *Three Types of Practical Ethical Movements of the Past Half Century* (New York 1922) ch. i; Laubenstein, P. F., *A History of Christian Socialism in America* (unpublished thesis in library of Union Theological Seminary, New York 1925).

CHRISTIAN SOCIALIST PARTY, AUSTRIA. See PARTIES, POLITICAL; CATHOLIC PARTIES.

CHRISTIANITY. The primitive teaching of Christianity set before mankind the ideal of a life based simply and solely on the love of God and man. One love implied the other, for if a man loved not his brother, whom he had seen, how could he love God, whom he had not seen? And if he did not love and trust God as a father how could he understand that all men were God's sons and therefore his own brothers? How could he avoid occupying himself with the things of the world which set man against man? In Christian love, mankind became as one family in which the needs of any one are the concern of all, in which none is before or after the other, none is greater or less than another, and all are protected by a Father so omnipresent that not a sparrow falls to the ground unheeded by Him. Man, therefore, should not be anxious about the morrow, heaping up riches when he cannot tell who will gather them, but should meet the difficulties of the day, raising the ass or the ox from the pit even on the Sabbath, minis-

tering to the needy and serving the Lord in cheerful contentment with his lot. Such a life may be achieved by every man in ordinary society, for it depends primarily on his own personal love and trust. Although there may be those who will injure and spitefully use him, he will reply to injury with beneficence, to evil with good. It was understood even by the Gentiles that they should love their friends; but the Christian loves his enemies as well and turns the other cheek to the smiter. He must not even vindicate his rights; if a man takes his cloak, he must let that man have his coat also, for the meek shall inherit the earth. He must assert not himself but his Christianity. No mortification of the flesh is enjoined for its own sake—marriage and the natural affections are assumed, and the sex teaching is simple and wholesome. It is only if the family tie obstructs a Christian call that it is wrong. When the call comes to any man he must leave all and follow it. Asceticism is no end in itself; but all desires of the body and all claims of personal love are swept aside if at any point they interfere with Christian duty.

While the Christian life is open to anyone, in any society, however full of oppression and wickedness, its natural fulfilment and perfect expression are in a brotherhood of the believers. This brotherhood will have no worldly aims. It will not seek to dominate either the world of nature or the world of man, although it will seek to draw all men into it by spreading the light. Its aim is to live by the law of love. The physical necessities of life it will secure by honest labor and by sharing all things in common, and even its apostles will work with their hands at tent making, or whatever it may be, so far as the first duties of the Christian mission allow them. Work is a duty; if a man does not work he shall not eat. On the other hand, there is to be no self-enrichment. It is hard for a rich man to enter the kingdom of heaven, and all that a man has, beyond his personal necessities, he should give to the poor, or rather bring into the common stock. At the same time, outside the community the laws of civil society and the authority of the rulers are accepted. To Caesar are to be rendered the things that are Caesar's. The powers that be are ordained of God. Christ's kingdom is not of this world.

Such communities sprang into being in many places during the apostolic age. Their simple communism was not, as in the monastery of a later age, a communism of production. The ordinary Christian had his employment in or-

dinary life, but he brought all his superfluities into the common stock. But though there was no collective organization of production, there soon came to be organization of church government, including the administration of the common funds. The communistic rule might be very strict, as the story of Ananias and Sapphira shows (for while the punishment might be justified on the ground of their deceit, the point of the tale is that no partial sacrifice of wealth avails). A more lenient view, however, goes back to very early times; and in any case this simple communism could hardly survive the growth of the Christian communities. Broadly speaking, communism as a system which, without excluding all personal possessions, makes the common wealth dominant, works well under one of three conditions. First, it operates in every well ordered family where, whatever personal possessions are recognized, the fundamentals of wealth are shared alike, and where in case of shortage the weak and helpless are served first. Secondly, it works well in very primitive communities where none has risen above the rest, all are concerned with day to day needs, all are born and bred in one tradition and in fact form a kind of enlarged family. Thirdly, it functions among men united by a common purpose—even a common need, as in the case of a shipwrecked crew—to which everything personal gives way; such a community was the early Christian church, and such were the best of the monastic brotherhoods. As long as the common dominates the personal, group communism holds its own. Under the first condition mentioned, the common dominates through the strongest natural affections. Under the second, personal initiative is hamstrung by the absence of opportunity for self-advancement. Under the third, even the strongest individuality may be held in restraint by the universal conviction of the common purpose; but as soon as the insincere and half converted come in the tie is dissolved. Communism, although preserved in the monastery, is for the laity reduced first to the duty of applying superfluities to the common need, and then to the obligations of charity. Finally the spirit of charity itself frequently perishes in its "organization."

In this connection, however, it must be acknowledged that obligations to the needy and a certain vaguely defined trusteeship in the possession of wealth have been continually maintained by Christianity in most if not in all of its forms, and that sociologically the institu-

tion of Christian ministers, lay officials and establishments for the relief of indigence and suffering are regular features of any Christian society. Exactly how Christianity compares in this respect with other religions, or with pagan or secular states, it would be difficult to say without an elaborate and difficult examination. Material beneficence is one of the oldest and most universal of the virtues. Islam and Judaism are notable for their insistence on works of mercy. Christendom is remarkable for the universality of its philanthropy, for the great variety of its efforts which have organized distinct forms of relief for so many different kinds of suffering and for the exceptional self-sacrifice of doctors, nurses and ministers of religion.

While simple communism was bound to melt away with the expansion of Christianity, the question of the relation of the church to civil society became increasingly important. From the first it was to recognize the powers that be, but at the same time "saving always the duties of a Christian" was an understood condition. How was it to comport itself in regard to the laws of the land when opposed to Christian duty or the Christian spirit? Confronted with a pagan government there were points on which the Christian clearly could not conform, and these came to the front in every persecution. And there were deeper issues by no means settled when Christianity became a state religion and the whole empire in name a Christian brotherhood. How were the law of the state and the law of love to be reconciled? The state recognized war, had courts for the redress of private wrongs and the punishment of criminals, used the oath—and in those days torture as well—in the legal procedure, guarded private property and allowed the indefinite accumulation of wealth together with its inheritance and bequest, sanctioned slavery and the sale of men, women and children, allowed the exposure of infants and recognized divorce. Some of these things were, as all would now admit, abuses; others, especially the institution of courts of law and the recognition of private property, appear integral to organized society. War society hopes to abolish, but so far military defense has appeared a necessity of state organization. What was Christian teaching to do in the matter? Nominally it had conquered the western world. What was the real relation to be? Was it to absorb the world or to be absorbed by the world as conquerors so often are by the conquered? Or was it after all to stand

aloof from the world and establish a dual law—worldly and other-worldly—for mankind?

In order to understand the course of events we must first appreciate the Christian attitude as it came to define itself. Primarily the Christian life was inward. It was something that each could attain for himself and was independent of outward circumstances. Slave and emperor could be equal as Christians, just as they had been equal as stoics. Material possessions were indifferent, except indeed that their increase added to the difficulty of remaining a good Christian. It must in truth be added that even intellect was indifferent, for out of the mouths of babes and sucklings was ordained praise. Neither philosophy nor science, neither art nor literature, was essential. The Christian teaching might broaden its outlook, but as such it had no essential concern with the Hellenic conception of a many sided development of personality or with the modern ambition to read the secrets of the universe and to acquire thereby a control of the conditions of human life and development. Nor was it concerned with the humanitarian view that institutions and even moral laws involving great suffering to men and women must be wrong. The law of God was in essentials known and must be accepted come what might. Man was made for no other happiness here on earth but the happiness of accepting that law and of taking with contentment that lot which it would allow him. Thus it would be quite unhistorical to criticize the work of the churches as if they had meant to recreate society on the lines of modern humanitarianism. Modern Christians may, and many do, regard this humanitarianism as the natural development of Christ's teaching, but in the early formative days no such development was in sight. Christianity had primarily to maintain itself in a society which at first was hostile and, even after Constantine, contained all sorts and conditions of men—unbelievers, nominal Christians, Jews, infidels and, above all, heretics. The ideals of the simple brotherhood of all true Christians were inapplicable. The original teaching, as well as the wisdom of Christian leaders, recognized the state as a necessity. The problem as it appeared was to find some reconciliation on the points at which state law and Christian law were in definite conflict whether in letter or in spirit.

In form—and form affected substance—the solution was found in a slightly modified acceptance of the stoic conception of the *jus naturae* and the Golden Age. By nature, the

stoics taught, man was free and equal and there had been a Golden Age in which man had actually so lived. From this state he had, however, fallen off, and the *jus gentium*—the legal principles common to all nations—recognized subjection and inequality, while the positive civil law of any particular state, and of course of the Roman Empire, imposed its own special obligations on its citizens. Where the civil law conflicted with natural law it was in principle void; but the stoics refrained from the effort to abolish it, primarily because they held that the wise man was superior to all institutions, since these were but external things, while he could always regulate his own conduct by the light of reason. But as jurists they did seek to bring the civil law as near to the law of nature as might be, short of revolution.

The Christian fathers took over these conceptions, adding an explanation that the falling away from the state of nature, or innocence, was due to sin and that the state was the divinely appointed remedy for sin. Nature was good, for it was what God made. Actual society was defective, for it was the outcome of man's sin. But law and the state were good, as it were at one remove, because they were God's appointed remedy for sin. Because of their origin they involved hardships, like slavery, and allowed things unfitted for a Christian brotherhood, like the accumulation of riches. But the true Christian was above or indifferent to circumstances. He might be loyal and trustworthy as a slave. He might use his riches for the glory of God or for the benefit of the poor. These considerations together governed the attitude of the church, and it was left to the enthusiasm of the sects of the future to strive after fuller Christian ethics. In the meantime state law was to be respected, with two exceptions: if it was in clear and literal conflict with Christian teaching, it was to be abolished; if it was contrary to the spirit, it was to be softened and amended.

Among the points of conflict slavery would seem to us perhaps the most definite. Yet neither stoicism nor the church sought its abolition, although its justice had been challenged by thinkers as early as the fourth century B.C. Here the doctrine of the indifference of circumstances was as fatal to the church as it had been to the stoics. Slaves must obey their masters, and masters must be kind and just to their slaves. The slavery of the later republic and early empire had been intolerably harsh and cruel,

but for two centuries and more the stoic jurists had been at work upon it, and the worst features had been suppressed. Morally the stoics recognized the equality of slave and freeman and the church similarly maintained that slave and master as Christians stood on the same footing, and it accepted slaves, at least on emancipation, for the ministry. As to legal rights the canon law imposed its own penalties on maltreatment of slaves. What was most important was that the canon law gave sacramental sanction to slave marriages, which originally had no recognition in law. Some slight advances toward such recognition had indeed been made under the pagan empire, but it was by a law of Constantine that the separation of slave families was forbidden. The consent of the master was at first required to validate a marriage of slaves, but this condition was eventually abolished by Pope Hadrian IV. Marriages of slaves and free were allowed under Justinian. In the view of the church the consent of the parties was the sole prerequisite of marriage, and on the whole the church stood by its principle in relation to the slave and to later feudal rights. Yet the right of feudal superiors was long to survive, and even in the sixteenth century the Council of Trent found that it was too often the custom for secular lords to compel men and women to marry against their will, a practice which they anathematized on the grounds that it was *maxime nefarium matrimonii libertatem violare*.

These were the most important contributions to the rights of the slave made by the mediaeval church, which for its part did not hesitate to hold serfs and is indeed charged with more than average tenacity in keeping its own. Christianity did not abolish slavery. But there were two ways in which the church's action made for the gradual extinction of the institution. First, it opposed the enslavement of fellow Christians, whether as war captives or through the slave trade. For example, the traffic in slaves which went through Bristol to Ireland was suppressed in the eleventh century by Wulfstan, bishop of Worcester, and although by a regrettable inconsistency the church allowed a man to "commend" himself, his wife and children to an abbey, its influence helped to secure the limitation of debt slavery to the period necessary for redeeming the debt. These limitations went a long way in reducing the supply of slaves. Secondly, the church always encouraged emancipation as a deed of charity. It is clear, therefore, that the influence of the church must be

reckoned as an important factor in the extinction of the slave class, which, so far as true chattel slaves are concerned, was nearly complete in western Europe by the end of the twelfth century.

The enslavement of non-Christians was another matter. All through the Middle Ages a regular trade in slaves was maintained by the Genoese and Venetian merchants in the Levant. To deal in Christians was prohibited, but did adherents of the Greek church count as Christians? Authority was inclined to wink when in practise the negative view obtained. In any case, there is evidence that there were slaves in considerable numbers in Genoa and Venice (where in 1368 they were numerous enough to constitute a public danger); and although they were rarer inland, there were 339 sales of slaves (mostly female) in Florence between 1366 and 1397. The matter became much more serious when explorers began to open out new worlds, where backward peoples were at the mercy of European arms and organization. To the church the prospect of converting the natives was held out as a bait, and this hope was the explicit ground of the bull by which Pope Nicholas V in 1454 sanctioned the importation of Negro slaves into Portugal. In full consistency with principle the enslavement of Negro neophytes was condemned by Pope Pius II in 1462. Yet presently doubts arose on the whole question. Columbus' despatch to Spain of five hundred Indians as slaves was the occasion of a juristic dispute, and the Indians were eventually sent back by Queen Isabella. When the Negro traffic to America began, the popes, it is but fair to say, made successive efforts to check it. Although no one stopped Sir John Hawkins, who first brought Negro slaves to North America and believed that he was acting as a good Christian, it was a Christian sect, the Quakers, that led the protest against this second and very detestable slavery. Churchmen, Methodists and rationalists co-operated in the eighteenth century movement for the suppression of the slave trade and in the nineteenth century extension of the struggle to the suppression of slavery. It would be unreasonable to attribute the success to the Christian elements alone. It was perhaps the first, but by no means the last, case of cooperation between an enlarged and enlightened Christian conscience and the secular humanitarianism which was beginning to inform ethics and law.

It must be added that the struggle for elementary rights for the weaker peoples is by no

means over, that forced labor may come perilously near to slavery, that social exclusiveness and the closing of avenues to skilled employment may make the Christian native an outcast, and that in this struggle the Christian missionaries are the force on which we have now mainly to rely for the education of public opinion on this important and dangerous aspect of the "expansion of Europe."

Warfare stood in even sharper contrast to Christian teaching than slavery, and it was in this conflict that the failure of the church was most conspicuous. The early Christians held military service unlawful, but in spite of many prominent supporters the rule was soon relaxed, and a full blooded defense of "just wars," i.e. wars for the redress of wrongs or for self-defense, was but feebly qualified by censure of malice, cruelty, vengeance and the lust of dominion. Ambrose—although he could compel a king to do penance for a massacre—denounced the principle of non-resistance and declared that he who refused to defend a friend was as bad as the aggressor. In the Canon de Treuga the church made an effort to mitigate private wars, but throughout history the churches have given moral support to official wars. It was left to the sects that went back to primitive teaching—the Anabaptists and above all the Quakers—to lead an opposition to war as such and to wrestle as best they might with the resulting problem of internal security.

The methods of war were indeed so far alleviated that the killing of non-combatants, the enslavement of Christians and the refusal of quarter were forbidden, although in justifying ransom the canon law, as stated by Gratian, seems still to imply that in principle the life of the conquered is forfeit. Unfortunately these prohibitions were difficult to enforce, and the wars of Christendom hold their own for horror when matched with those of the heathen, the wars of religion being perhaps the worst of all. Possibly the best defense of Christianity is that the secular spirit, working since the days of Grotius through international law, has as yet little to show, and in the World War even the distinction between combatant and non-combatant began to crack. The *via media* between the piety of non-resistance and the crude realities of oppression and aggression has not been discovered for nineteen centuries.

What now of the element of force within the life of the state—the enforcement of law, the procedure of courts and the punishment of

crime? As a persecuted sect the Christian church had its own legal system, resting on penance and excommunication. As an official religion it at once recognized the lawfulness of public justice. Retaliation by the individual is wrong, but retaliatory punishment may be lawfully inflicted by the judge. For he gives not evil for evil, but justice for injustice, which, says Augustine, is good for evil. An ingenious turn, although not as honest as Confucius' denial that justice to the offender can be reconciled with Lao Tzu's doctrine of good for evil. But consistent or not, this decision of the church was socially necessary. When, however, we find excuse offered for the faithful who ex officio either exercised torture or passed a capital sentence, we are on different ground. The church did not in fact use its opportunity for abolishing the use of torture, which disgraced the Roman law. About capital punishment it certainly had its doubts. It became the rule that ecclesiastics could not enforce it, and clerks omit the words in the sentence, leaving the criminal "in mercy." There was even in the Middle Ages, particularly in the tenth and eleventh centuries, a definite revulsion against capital punishment, and it was, for example, actually abolished in England by William the Conqueror. The substitutes of blinding and castration were even worse than the original, however, and by the thirteenth century, without legislation, death resumed its place as the penalty for felony. Centuries earlier the whole system of Roman law had crumbled in the West under the barbarian invasions, which had reintroduced the feud, and in the courts the oaths of purgation and the ordeal. The church did its best to resist this rebarbarization, but had eventually to make terms with it. Not without controversy it gave its sanction to the ordeal; and Charlemagne ordered all men to believe the judgment of God without any doubt. In the meantime, however, the church was feeling its way back to rational justice through the courts of inquest into morals held by the bishops. They were ably seconded by the growing power of the king's court. And while both bishop's and king's courts at first allowed the oath of purgation or the ordeal by combat or by magical procedure, these methods were suppressed under Innocent III, and ordeals in particular were condemned by the Lateran Council of 1215. It took time to consolidate the victory. The ordeal by combat, forbidden in France by Saint Louis in 1260, lingered in England through the thirteenth century, when champions for hire still offered

themselves; and some remnants of the old law still survived in the early nineteenth century.

On the whole, however, the principle of impartial justice, based on evidence and supervising public safety, prevailed, and the church certainly played its part along with the state in securing this first principle of modern civilization. On the other hand such methods of barbarism as the use of torture in procedure and extreme severity of punishment survived; the latter tended rather to increase than to diminish, and with the exception of the temporary check on capital punishment does not seem to have been combated by the official churches, which indeed in their own dealings with their special enemies, the heretics, only led the way. The penal law of Europe was a disgrace against which there was no serious complaint until a protest was led by the Quakers and supported alike by the utilitarians and the Evangelicals in the eighteenth and nineteenth centuries. Here again "primitive" Christianity and ethical rationalism found themselves at one.

The primitive theory of communism continued to the Middle Ages as one of those principles of natural law which, owing to sin, had been set aside by civil law. Aquinas, however, does not allow that there is any true contradiction, but considers that natural law simply neglected to make any division and that the omission was supplied by civil law, and rightly, in his view, since private property tends to the avoidance of quarrels and to efficiency in production and administration. Aquinas in this connection is closer even than elsewhere to Aristotle, in whose antithesis—"private acquisition, common use"—he finds the solution. The Christian must use his property for the common benefit and, what is remarkable, in case of necessity the "natural law" of communism revives. To supply the actual and urgent necessities of life—c.g. to meet imminent danger—whether for self or for another, it is no crime to take another man's superfluities, whether openly or secretly. One may regard the Poor Rate (after all a compulsory levy on those who have for the benefit of those who have not) as a regularization of this principle, which otherwise might seem to smack rather of Robin Hood than of Augustine, and certainly goes far beyond the common exhortations to charity. At the same time, in returning to Aristotle Aquinas was preparing the way for the coming industrialism. For the appeal to production and efficiency is

distinctly secular in spirit, while the vindication of private ownership departs not only from communistic idealism but from the feudal order, in which the most important property was held on a basis of definite obligations in respect of it.

The methods of acquiring property were always a matter of concern to Christian ethics to the extent that they involved any form of exchange in which one man might get the better of another. To Christian ethics this was the sin of covetousness, and it was the universal opinion in the church that in buying and selling a man should ask and give the just price, and that in seeking payment he should demand what was necessary to support him rather than the most that he could get. Above all, lending should be a friendly act and should not be an occasion for usury, which always appeared to the legists, and particularly to the schoolmen under the influence of Aristotle, as a gross and palpable method of getting something for nothing. These rules of behavior bore a simple and intelligible relation to the rather primitive economy into which the world had relapsed after the luxuries of Roman civilization. The modern economist would probably be willing to admit that a man should give and take the just price if he only knew what the just price was. In a simple society it seems to be known. It is what always is, always has been and always will be given by men who know what they are about. It is in fine the customary price, and if a seller gets more than that it can only be either by deceiving the purchaser or by taking advantage of some special necessity. In other words it is a piece of individual wrongdoing, as the modern economist would very willingly admit. But as soon as markets begin to extend, as alternative sources of supply occur, and, finally, when competition sets in, customary standards lose their hold. The classical economy has built itself up around the conception that there is really no exchange value attached to a thing except that which can be arrived at by the higgling of the market in free and open competition. The difficulty is not unfelt by the exponents of the canon law and as the economic system develops they take account of the impersonal forces determining value, but without deserting the principle that it is illegitimate to make selfish profits at the expense of another. It must be borne in mind, however, that for them a just price and just remuneration is that which is suited to maintaining a producer in the state of life to which he is accustomed, without superfluities—a standard which it must be said seems

to accept and stereotype the class distinctions of the feudal world.

Lastly, with regard to usury, which has a long and rather tangled history, the canonists were right in condemning the man who takes advantage of the necessities of the peasant. But they misunderstood the nature of interest when they troubled themselves with distinctions between interest on money and rents on land, between recompense for risk or damage and bare payment for the use of money. For a long time they did not appreciate that the use of a loan was a valuable asset for which the borrower would be just as willing to pay as, say, for the tool which he had to buy outright in order to carry out his job. In large scale transactions of Jews and of great firms like the Fuggers, however, it became apparent that the big men who borrowed from them were not in a position to be put upon, but were acting with their eyes open on the well founded belief that they were getting full value for the interest which they undertook to pay. If the self-interest of important men was the main motive for the toleration of such transactions, there was a real distinction, at first no doubt more readily felt than accurately formulated, which eventually led to a very different view of interest. How far the prohibition of usury held back the development of industry and commerce is not very easy to say. Its most palpable effect was to concentrate finance in the hands of the Jews, who had no scruples about taking usury from Gentiles. But eventually the entire machinery of regulation proved ineffective to deal with the oncoming rush of the new industrial forces, before which the old rural economy and the guild monopolies went down, carrying bad things like serfdom and good things like neighborly dealing along with them in their ruin.

It has been a common opinion that the Protestant Reformation was responsible for the economic individualism which came to dominate the modern world, and which as a doctrine won its way to supremacy during the eighteenth and nineteenth centuries. But recent writers have shown this to be a mistake. Luther's attitude on questions of industrial regulation was, indeed, inconsistent and quite unsystematic. Calvin, however, not only took over the general conception of the duty of the church to regulate the economic order but carried it through with an efficiency and particularity which the mediaevalists might have envied. And it was the Elizabethan and Stuart legislation, notwithstanding its opposition to Calvinism, which was not only

insistent upon the authority of government but made the first effective attempts to adjust its regulations to the changing order of things. Calvin, however, and with him the forms of Protestantism, deriving and yet departing from his impulse, introduced (or at least gave real effect to) two new departures. They definitely recognized the legitimacy of interest under strict moral limitations, whereby the new capitalism achieved legitimacy and social respectability and, further, they gave to the industrial virtues of probity, industry and enterprise an acknowledged place in the moral order. Cutting off much of the gaiety of life they sought an outlet for human energy in cultivating the fruits of the earth for the benefit of man, conceiving success as a testimony to the glory of God and even as a proof of divine favor to the elect. The Puritan type, essentially serious and strenuous yet on principle repudiating asceticism and monasticism, living in the world, marrying and giving in marriage, needed a direction for its energies which was secular and yet honorable and pious. Wealth could be turned to the service of God and to the benefit of the poor, and in fine the doctrine that the meek should inherit the earth might take the form of a demonstration that the elect understood how to cultivate its fruits and to use them for the common advantage. The repudiation of luxury, wanton expenditure and idleness could take the form of the exaltation of thrift, strict application to business and austere self-control in the enjoyment of its fruits, which would after all only result in their continued multiplication.

These principles, in R. H. Tawney's view, held the field in England until the Restoration, after which they suffered from simultaneous assaults from more than one source. In the first place, there was a general reaction against severity of control, religious and even moral. In the second place, the monarchical and still more the ecclesiastical machinery for the control of industrial relations suffered in the Puritan estimation from the general unpopularity of church and king. But, in the third place, and what turned out most fundamental, the new commerce and particularly the new finance began to claim autonomy and evolved its own science of political arithmetic, which in the next century began to be known as political economy. The central idea which emerged in this study was that economic relations left to themselves regulated themselves. There was an underlying harmony of interests, a hidden hand, which

brought it about that intelligent but selfish men in their dealings with one another were forced by their mutual relations to give the best service to each other while merely seeking the best advantage for themselves. Regulation from above might have its exceptional uses, but too often it was inept and in the main only served to block the natural channels into which unimpeded self-interest would flow to the advancement of wealth and the greatest common sum of prosperity. Even the good intentions of government were by no means above suspicion. In England the aristocracy had obtained power and used it for its own advantage. In administration it was difficult enough to get bare honesty. No one would have dreamed of committing to the rudimentary civil service of the eighteenth and early nineteenth centuries the great complex of regulations which are efficiently worked at the present day. It was by no means certain that to tighten regulation would benefit the sufferers from the industrial changes, and many of the old controls were manifestly out of date.

It would be unfair to condemn the economic movement root and branch for its emancipation of industrial life from religious, legislative and administrative control. Men like Adam Smith were as humane and as much inspired by the conception of the common well being as any mediaeval canonist, but they believed that in what they called the system of natural liberty they had found the right way, and so far as they were condemning the governments and governmental methods of their experience who shall say that they were wrong? The real mischief was, as the Hammonds have shown, that in the critical early period of the agrarian and industrial revolutions the governing classes took from Adam Smith what suited them and quietly ignored what was inconvenient to them. Where it was a question of protecting the standard of the workers the doctrine of *laissez faire* seemed a heaven sent message. Where it was a question of enclosures there could be no objection at all to the use of the law. Freedom of contract and exchange was everything where the employer of labor required the unrestricted right of working women and children for the hours and under the conditions which suited him, but freedom of imports was all wrong when it would lower the price of agricultural products. The incidence of Christianity on the economic life seems to have been virtually in abeyance during the eighteenth century until the time of the Methodist and Evangelical revivals. These bore their legislative

fruit in the agitation for the factory acts and in the reform period were, so to say, incarnated in the great dominating personality of Lord Shaftesbury; while the Christian socialism, which began with Maurice and Kingsley and later in the century was carried forward by a small but well instructed and influential group of High Churchmen, has undoubtedly played its part in the reestablishment of moral ideas in industry. To such forces as these we may fairly attribute the contrast between the markedly anti-Christian attitude of continental socialism and the relatively friendly relations obtaining in British society. Once again we find the primitive elements in Christianity in cooperation with ethical rationalism.

In the law of the family Christian doctrines have been dominant since Constantine. Christian ethics, for reasons which have never been fully explored, have tended to concentrate on the sexual relation. The tendency does not originate with the Gospels, whose sex teaching is simple and free from all morbidity. Its germ appears in the kind of bewilderment with which St. Paul speaks of women, but did not mature until the appearance of a form of asceticism which condemned the sexual relation entirely. The sounder mind of the early church rejected this exaggeration, but accepted virginity as the better way and saw an incompatibility between the sexual life and the exercise of spiritual ministration, which eventually hardened into the prohibition of marriage to the clergy in the western church, with effects beyond measure on the relations of priesthood and laity. For the laity itself the church would recognize marriage only in the form of indissoluble monogamy. So far as monogamy was concerned it had no difficulty with the Roman law but a good deal with the customs of the invaders, who allowed chiefs and kings more than one wife. Long centuries later some of the reformers even weakened on the point of principle, having political convenience to tempt them and Old Testament patriarchs to excuse them. But this was a brief aberration. The matter of divorce was more serious. The Roman law allowed the easy dissolution of marriage. The canonists were not satisfied until in theory they had suppressed it altogether. Separation, in cases of cruelty and gross misbehavior, they had to allow, but there could be no breaking of the marriage bond. Innocent or guilty, the parties that could not live together must live celibate. Yet marriage was not

rendered particularly secure, for although it could not be broken it might be annulled, no matter how long after its consummation, if any flaw were found in its conditions—for example, if the consent of either party had not been genuinely given, or if they were found to be entangled somewhere in the web of forbidden consanguinities, affinities, spiritual relationships. The ramifications of this web were such that it has been doubted whether in the Middle Ages the fully valid marriage was not rather the exception than the rule. The tangle was, however, combed out by the Reformation and, less drastically, by the Counter-Reformation. The Protestants, moreover, denying marriage to be a sacrament, have gradually come to allow divorce, although they have for the most part declined to accept the full consequences of the alternative view that marriage is a contract.

The Roman woman, particularly the matron, had won a status and a freedom scarcely paralleled before, unless it were among the most primitive of men, or since, unless among the most advanced. Some early civilizations, the Egyptian and to a degree the Babylonian, had given woman a good position. It was the distinction of Rome that the position of women improved as civilization advanced, and that, notwithstanding vague general charges of immorality, she gained in freedom without loss of man's respect. Of her freedom one very important element was conserved and even extended by Christianity in the doctrine of free courtship and consent in marriage, noted above. Otherwise the woman, and especially the wife, sank into a position of dependence of which the best one can say in general terms is that it was not everywhere as abject as it was under English law. Fierce punishments for irregular relations signalized the first entry of the church on the scene of legislation, and in this work Reformers were even more ardent than Catholics. The suppression of infanticide was a great advance on pagan morals, but the treatment of the unmarried mother was harsh to the point of cruelty.

Yet in some ways Christianity raised the status of women. The ascetics, in too many of whom are evident clear signs of sexual abnormality, might think of women as limbs of Satan, and yet, upon the whole, Christianity (and not only the Christianity of Christ, but of the churches—the eschatology, the ceremonies, the confessional) made its prime appeal to women, and through the ages it is women who have kept men Christian. Women took a prominent place

among saints and martyrs and have always been in the center of works of charity. Comparative ethics will justify the claim that Christianity brought to fruition a type of womanhood little developed and still less recognized before its time. With the recognition of this type men began for the first time to think of women as of a finer texture than themselves, and romantic love ousted sensual passion as well as mere adventure from the central place in literature. Such opinions may be derided today, but we are here dealing with historic facts, and the attitude to women, which became distinctive of western civilization, is historically one of the most important sociological effects of Christianity and must in fairness be set against those other influences upon sex and family life which were less favorable to the status of woman.

There is probably no one so discontented with the measurable effects of Christianity upon society as the serious Christian. But of the method of estimating these effects as attempted here he will probably say that on such lines we fail to see the wood for the trees. Christianity is a religion of the spirit, and it is in the spirit and not in the outer law that its work has been done. To have established the authority of conscience and widened and deepened the claims of man on man are the great permanent achievements of Christianity, expressed not in specific institutions but in the general spirit of social life. Such achievement is difficult to bring to the test of fact, indeed more than difficult unless we have an agreed system of values. For the sake of argument I will assume what I take to be the standards of ethical rationalism and try to imagine what an ancient rationalist like Seneca or Marcus Aurelius, if he could return to the world, would say of Christendom. I think, then, that he would judge our societies to be full of contradictions and unsolved problems, but to be on balance better and far more full of hope than his. If Socrates were the *revenant* his attitude would be more uncertain. He would no doubt ask us a number of awkward questions, for instance whether automobiles and wireless really make us happier, and, if not, why we spend so much on them; while as to hope he might maintain that even in the humiliated Athens of his last years she lingered at the bottom of Pandora's box. Nevertheless, I think he would come to recognize a larger outlook than that of the city-state, a truer appreciation of the common man than that of the Greek intellectuals and in fine some things

that were not on his horizon at all. I think we could substantiate these judgments in gross by comparisons in detail on the major points. But if, discarding all extravagant claims, we take a favorable view of modern Christendom, we have still to ask how far its advances, or for that matter its backslidings, are due to Christianity and how far to such other causes as freedom of thought, the advance of knowledge, the development of industry and political organization. A very searching analysis would be needed to disentangle factors so intimately interwoven.

But two results have emerged in our brief discussion. The first turns on the discrimination of periods and of churches within Christianity itself. To the ethical rationalist, who on this point at least figures as an impartial outsider, it appears that the sociological contribution of some of the sects has been more notable than that of the official organization, and that if the message of essential Christianity is taken to heart by individuals of all churches, it is enforced collectively only by some churches or only at some periods and in some relations. When so taken, however—and this is the second result—the message goes deep, for this same rationalist, whose natural sympathies are all with knowledge, will yet recognize as an impartial investigator that the scientific view in social applications has suffered from crudities and limitations, and economic advance has been responsible for oppressions and degradations of standard to which essential Christianity is a great corrective. Not accepting its speculative foundations such a thinker is free to criticize its judgments and may not even accept all its principles of valuation, but he knows that the essence of its social teaching must be absorbed into anything that can call itself a rational reorganization of society.

L. T. HOBHOUSE

See: RELIGION; RELIGIOUS INSTITUTIONS; PRIESTHOOD; COMMUNISM; COMMUNISTIC SETTLEMENTS; ASCETICISM; MONASTICISM; CHARITY; SERVICE; RELIGIOUS ORDERS; MILITARY ORDERS; PAPACY; CANON LAW; APOSTASY AND HERESY; INQUISITION; PROSELYTISM; MISSIONS; REFORMATION; SECTS; CULTS; CHRISTIAN SOCIALISM; SOCIAL CHRISTIANITY; PROTESTANTISM; PURITANISM; HUMANITARIANISM; MORALS; ETHICS; PAGANISM; CONFUCIANISM; BUDDHISM; BRAHMINISM AND HINDUISM; JUDAISM; ISLAM. See also in Part I of the Introduction to volume I, THE UNIVERSAL CHURCH and THE GROWTH OF AUTONOMY.

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CHRYSTOSTOM, JOHN (347-407), church father and doctor. He was priest in his native city of Antioch from 386 to 398 and afterwards patriarch of Constantinople. John's fame as the greatest preacher of the early Christian church won for him after his death the epithet Chrysostom, or "the golden mouth"; both by his contemporaries and by subsequent historians he has been praised as a tribune and attacked as a demagogue. His preaching, especially at Antioch, was devoted to the reform of morals on the basis of early Christian social life. Great wealth was in the hands of a very few excessively rich men, who spent it on luxury. Of the remaining population of Antioch one tenth was destitute and eight tenths lived in comfort. The rich were denounced by Chrysostom for having acquired their immense fortunes by violence, cheating, monopolies and usury, and for their indifference to the distress of the poor. As the result of a law of the empire which made municipal coun-

that, while the earlier systems of status and rank arose spontaneously out of a common way of life and felt themselves to be organic units belonging to a whole and subordinating their interests to it, classes, on the contrary, are self-seeking and disintegrating groups whose destructive effect on state and society must be reckoned with. Over against considerations of this sort it is to be noted that many in Europe today look forward to a displacement of the class structure by a return to a division of the population according to ranks determined by occupation. Such a transformation has already been realized to a large extent in Fascist Italy.

PAUL MOMBERT

See: SOCIETY; SOCIAL ORGANIZATION; SOCIAL PROCESS; STATUS; GROUP; CASTE; SERFDOM; SLAVERY; ARISTOCRACY; BOURGEOISIE; MIDDLE CLASS; PROLETARIAT; PEASANTRY; PRIESTHOOD; LANDED ESTATES; CAPTAIN OF INDUSTRY; PLUTOCRACY; DEMOCRACY; INDIVIDUALISM; MOBILITY, SOCIAL; CLASS CONSCIOUSNESS; CLASS STRUGGLE.

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CLASS CONSCIOUSNESS. Classes in modern societies may be described as groups of individuals who, through common descent, similarity of occupation, wealth and education, have come to have a similar mode of life, a similar stock of ideas, feelings, attitudes and forms of behavior and who, on any or all these grounds, meet one another on equal terms and regard themselves, although with varying degrees of explicitness, as belonging to one group. The psychology of class differentiation has not been studied with sufficient thoroughness and there is as yet no generally accepted technique for the observation, analysis and record of the behavior of groups in relation to one another. Accordingly it is extremely difficult to say what exactly one is conscious of when one is class conscious. In the case of the ancient and mediaeval systems of more or less rigid estates (*Stände*) this problem presented less difficulty. It was possible, at any rate in the case of the upper levels of society, to point to determinate interests and purposes common to and characterizing certain classes. Under modern conditions classes can hardly be defined functionally, nor is it always possible to specify precisely the interests or purposes which members of a class have in common as against others.

Nevertheless, it is a great mistake to minimize the reality of class distinctions even in cases where it is not possible to point to definite cohesive groups clearly aware of their collective interests. While classes may become associations, as for example when they form the basis of political parties, they are not as such associational and they cannot be defined by their ends or purposes. But the psychological factors which enter into class formation, although more vague, are not necessarily on that account less powerful than those which bind the members of associations to one another. They may be interpreted best, perhaps, in terms of the modern theory of "sentiments." These are systems of emotions or emotional dispositions centering around a common object or having a common nucleus. The sentiments which are important in this connection are of three sorts. There is, first, a "consciousness of kind," as it has been called, in relation to members of one's class, a confidence that one can meet them on equal terms and that one's mode of behavior will be in harmony with the behavior prevalent in the group. There is, secondly, a feeling of inferiority in relation to those above in the social hierarchy; and thirdly, a feeling of superiority in relation to those below.

All these states of mind are extremely complex. This is due partly to the large number of gradations in the social scale and the continual intersection of levels in mobile societies resulting in a very intricate intermingling of attitudes. There are, for example, the fear of losing caste, the dread of sinking in the social hierarchy, the desire of upward movement or of improvement of status at least for one's children, the keeping up of appearances. Further complexity is due to the well known fact that the sentiments of equality, inferiority and superiority admit of subtle and intricate forms of inversion and compensation. Here belong the phenomena of the exaggerated aggressiveness of the upstart and the arrogant humility of the upper classes when they enter into relations with the lower. It may be remarked in passing that conscious and unconscious attitudes of the kind referred to play no insignificant role in what is termed industrial unrest.

The primary determinants of social stratification are without doubt largely economic in character. Economic conditions determine an individual's occupation, and this in turn is generally a fair index of his mode of life and educational attainments, from which again may usually be inferred the sort of people whom he

would meet on equal terms, the range of individuals from among whom he would normally choose his partner in marriage and so forth. In most European countries there are important differences in modes of speech and pronunciation which indicate class differences (see Meillet, Antoine, *Les langues dans l'Europe nouvelle*, Paris 1918, p. 126), and there can be no doubt that an equalization of educational opportunities and an increase in the facilities for contact and intercommunication between the classes, tending to diminish differences in modes of speech (and dress), would be likely to lessen the feeling of class differences generally.

The intensity of class consciousness depends upon a variety of conditions. The first of these is the growth of a tradition embodying common experiences and leading perhaps to common aspirations. It is clear that a conscious *esprit de corps* developed earlier among the upper or ruling classes, whose solidarity of interest was more obvious and who inherited something of the spirit of the rigid and determinate estates.

Stability and degree of social mobility represent another factor in the intensity of class consciousness. Social status generally implies a certain permanence and relative immobility, sometimes guaranteed by hereditary privileges, as in the case of castes and estates, or, when legal privileges disappear, by economic and other social sanctions of sufficient strength to render mass movement from class to class difficult if not impossible. The amount of social mobility influences the intensity of class consciousness in various ways. On the one hand, if movement up and down is easy and rapid differences in mode of life must tend to disappear or to lose in importance. On the other hand, if movement is possible but not easy the effect is to heighten a consciousness of the differences, since there will often be a strong desire to rise coupled with a fear of decline in the social hierarchy.

Conflict and rivalry are also important factors in the promotion of group consciousness. Thus national self-consciousness is heightened through wars, whether defensive or aggressive. In the case of classes the possession of common interests by members of a group is often first brought into consciousness by the need of defense against a common enemy, imaginary or real, and especially by being pitted against another group already conscious of itself. The importance of the idea of the "class struggle" in the history of socialism is well recognized and need not here be further dwelt upon.

To the extent to which social groupings rest upon and express true social functions class consciousness clearly has ethical value. Respect for one's calling, esprit de corps, the feeling of solidarity with members of one's class are necessary elements contributory to the fulfilment of the common good. In the case of the oppressed classes, moreover, a dawning consciousness of class is an important factor in the growth of self-respect and may be even indispensable in the struggle for freedom. On the other hand, class self-respect may deteriorate into class egoism. This, of course, is not a danger peculiar to classes, but is characteristic of all social groupings. For example, the sentiment of nationality, although valuable frequently because it gives self-respect to oppressed peoples and thus acts as an important agent in the growth of freedom and self-determination, may deteriorate into chauvinism and the oppression of minorities. In what is termed the class state, government has frequently been in the interest of a dominant class, leaving the rest of the population in a state of subjection. This is true even of the class dictatorships of some modern forms of socialism, although it is claimed that the class element in their conception is provisional and transitory and that the ultimate aim is to abolish all class distinctions and to govern in the interests of all. Whether the elimination of class partisanship is really possible remains to be seen.

MORRIS GINSBERG

See: CLASS; CLASS STRUGGLE; STATUS; GROUP; SOCIAL DISCRIMINATION; CONFLICT, SOCIAL; MOBILITY, SOCIAL; COLLECTIVE BEHAVIOR; SOCIAL PROCESS; SOCIETY.

Consult: Ruggiero, Guido de, *Storia del liberalismo europeo* (Bari 1925), tr. by R. G. Collingwood (London 1927) p. 381-87; MacIver, R. M., *The Modern State* (Oxford 1926) p. 400-06; Lukács, Georg, *Geschichte und Klassenbewusstsein* (Berlin 1923) p. 57-228; Watts, Frank, *An Introduction to the Psychological Problems of Industry* (London 1921) ch. vi; Michels, Roberto, *Zur Soziologie des Parteiwesens in der modernen Demokratie* (Leipsic 1911), tr. by Eden and Cedar Paul (New York 1915) p. 12-18, 235-96; Lippmann, Walter, *Public Opinion* (New York 1922) chs. xi-xii.

CLASS LEGISLATION. See EQUAL PROTECTION OF THE LAWS.

CLASS STRUGGLE is a phrase used to designate a form of social conflict, the theory of its origin and significance and the principle of action based upon such theory.

The idea of the importance of economic group

conflicts was not unknown to ancient writers. The differentiation of Greek society in the sixth and fifth centuries B.C., the conflict between the commercial classes and the landed aristocracy in Athens, Corinth and other Greek cities and the struggle of the demos for economic and political supremacy brought to the surface the idea of the divergence of group interests within the polity and of its effects upon political life. Plato and others pointed to "questions of interest" as the cause of the internal disorders of the Greek cities. It would be pressing the point, however, to assert that the concept of class struggle in the modern sense can be traced to Greek or Roman writers. Nor can it be said to be clearly discernible in mediaeval thought.

The roots of the idea lie in the French Revolution. Starting with a conflict between the third estate and the monarchy the French Revolution carried within itself the idea of estate or class. In its conscious aspects, however, the revolution was dominated by the idea of nationalism. It reconciled these contradictory ideas by making the third estate coextensive with the nation, by creating the abstract notions of man and of the rights of man and by postulating the individual as the unit of the nation.

Paradoxically the reaction against the rationalism of the Enlightenment carried forward the nationalist implications of the revolution for which the Enlightenment had provided the ammunition. The writers of the historical school of jurisprudence, the romantic poets, the political exponents of conservatism and such philosophers as Fichte and Hegel developed the theory of the creative powers of the "national spirit" and helped to give the concept of nation the prominence which it was to have all through the nineteenth century.

Beginning with the third decade of the century the other aspect of the French Revolution, group conflict, came to the fore. The struggle of the liberal elements against the Holy Alliance, the campaign for the English Reform Bill of 1832, the democratic upheaval of the thirties in the United States which carried Andrew Jackson into the White House, were clearly new steps in the forward march of the third estate. Historians and political theorists were stimulated by these events to rewrite history, and in the works of Mignet, Augustin Thierry, Adolphe Thiers, de Tocqueville, Macaulay and others may be found the first modern emphasis on group struggle as a historic factor.

Between 1830 and 1840 a new element en-

tered into the situation. The industrial workers came forward as the fourth estate, the new class of proletarians, and forthwith began to press their claims. In the contemporary literature of the labor movements of England, France and the United States the idea of class struggle made its appearance, and in the writings of the Saint-Simonists and of Louis Blanc it became more definite and precise.

These writers, however, are mainly fore-runners. Credit for the theory of class struggle belongs to Karl Marx and Friedrich Engels, especially to the former. These two authors after some preliminary groping in earlier writings formulated the doctrine in the Communist Manifesto in 1847 in a manner which has made it one of the striking and influential ideas of modern times. Marx further elaborated the theory in his *Zur Kritik der politischen Oekonomie* in 1859 and in *Das Kapital* (vol. i, 1867). He applied it brilliantly to the interpretation of the revolutions of 1848, of the coup d'état of Napoleon III and of the Paris Commune.

In broad outline Marx's theory asserts that in the course of making a living and of utilizing their technical and industrial equipment the members of society become segregated into classes which carry on different functions in industry and therefore occupy different positions in the social organization. Between these classes there arises an antagonism of interests and a struggle. Regardless of changes which have taken place in the industrial organization of society the division into classes and the struggle between these classes has persisted; hence the history of mankind has been a continuous struggle of classes. The modern capitalistic regime does not abolish the class struggle; it merely creates new classes and simplifies and intensifies the struggle between them. For with the development of capitalism society splits up more and more into two great hostile camps, the bourgeoisie and the proletariat. The bourgeoisie concentrates on converting surplus value into profits and the proletariat tries to resist this. In the ensuing struggle the workers realize that the power of the bourgeoisie rests on the ownership of the means of production and that economic exploitation can be ended only through the establishment of a socialist society based on collective ownership.

Marx predicated the inevitable victory of the proletariat on the assumption of certain inherent tendencies in capitalism: the rapid concentration of industry, the disappearance of the

middle class and the numerical growth and increasing misery of the working class. The modern class struggle was thus differentiated from previous class struggles in which one class succeeded another and used its victory merely to establish a new class rule. Under modern capitalism, inasmuch as the working class was absorbing all social groups with the exception of a small capitalist class, it could not emancipate itself without at the same time emancipating all society from every form of exploitation, oppression, class distinction and class struggle. Marx evidently intended to make a more detailed and exact analysis of the process of class formation and of class struggle. In the last chapter of the third volume of *Das Kapital*, "Classes," he raises but does not answer the question as to what constitutes a class.

Since class struggle was the dynamic factor which was carrying the historic process toward its final expression—the emancipation of the proletariat—it was necessary that the workers should do everything in their power to accelerate the process. In other words class struggle was not merely a theory but a principle of action and it became accepted as such by the socialist movement of the eighties and nineties.

With the beginning of the twentieth century the Marxian theory of class struggle became the subject of attack. Antisocialists tried to offset it by emphasizing the natural harmonies of society. Sociologists like Gumplovicz, Novikov and Durkheim stressed its limitations in view of the more dominating struggle between racial and national groups. More important still was the criticism which developed within the socialist movement itself, by the revisionists in Germany, by the Fabians in England and by the syndicalists in France. According to the revisionist Eduard Bernstein the trends which Marx had predicted were not currently dominant; as a result of political democracy and of the extension of economic opportunity the class struggle was becoming less and not more acute, and therefore the assumption of catastrophic change could not correspond to reality. Bernstein concluded that socialist tactics had to be revised in order to allow for cooperation between various economic and social groups and for a gradual reconstruction of social institutions to which sympathetic middle class groups might contribute. The Fabians, who visualized social change as a result of democratic and educational progress, could have still less faith in class struggle as a method or principle.

While revisionists and Fabians tended to limit the Marxian theory of class struggle the syndicalists found the theory not radical enough. Claiming that the class struggle was the only creative force in history and that Marxian political methods tended to weaken it the syndicalists elaborated the doctrine of direct action as a means toward reviving the idea of class struggle. To meet this double challenge orthodox socialists rallied around Karl Kautsky, who restated Marx's theories.

In recent years the theory of class struggle has become subject to new strains and tests. The World War revealed the potency of nationalist feelings and ideals. For four years class struggles throughout the world were either completely eliminated or overshadowed by the struggle between national groups. On the other hand the Bolshevik revolution in Russia, while reviving class conflicts, did so in a manner which was far removed from the clear cut Marxian formulae of pre-war days. These developments caused much confusion in the socialist movement which has not as yet been dispelled and which has reflected upon all socialist doctrines, including that of class struggle.

Present day exponents of class struggle may be divided into three major groups. One includes the reformist socialists represented by most of the socialist parties of the larger European countries and of the United States. In the literature of this group, although there is a ready recognition of the validity of the class struggle as a factor in historic development, the tendency is to stress more and more the democratic character of the modern state and the possibility of a gradual reorganization of social institutions. This group has therefore no particular interest in developing the theory of class struggle.

A second group is made up of the more radical socialists, best represented by the Austrians. The original Marxian emphasis on class struggle is retained but the most significant contribution of these writers consists in the attempt to elucidate the cultural and moral implications of the theory—the tendency of class struggles to lose the aspect of physical force and to depend more and more on intellectual and moral capacity.

Sharply contrasted with these two groups is the third, which consists of the communists, who have contributed most to the development of the theory of class struggle. The communists have been faced by two challenging facts. On the one hand, there was the post-war revival of national-

ism. On the other hand, the communists found that in their own efforts to establish a new regime in Russia they were forced despite an avowed class dictatorship to take account of the interests of the peasantry and of other groups and to try to work out conciliatory policies which were in essence nationalistic. Lenin was concerned especially with the problem of the relationship between industrial movements in capitalist countries and nationalist movements in colonial countries. His work was continued by other communist writers, especially by Nikolai Bukharin, who has been until recently the recognized theorist of communism.

The communists distinguish between social caste or estate, based upon legal characteristics, and social class, which is an economic category and includes persons who have the same function and who stand in the same relation toward other persons involved in the process of production. As the forms of production affect the forms of distribution, a social class is also characterized by its source of income. In other words, a social class is an aggregate of persons who have the same function in the productive process and who therefore have the same source of income.

The origin of classes is explained by the law of the division of labor. In every society there are two basic classes: one which commands and monopolizes the instruments of production, and the other a producing class. The specific forms of this relationship change from one society to another but in its essence it remains the same. In addition to the basic classes there are found in every society intermediate classes occupying a middle position between the commanding and the executing classes: transition classes resulting from the disintegration of previous group forms; mixed classes including persons who in some respects belong to one class and in other respects are more akin to another class; and *déclassé* groups consisting of beggars, vagrants and the like. The particular forms of these secondary classes also vary from one society to another, their variation giving color and form to the whole social structure.

In any class society the process of production is simultaneously a process of economic exploitation. Those who carry on the physical work receive less than they produce, not only because a portion is necessary for the extension of production but also because they have to support out of their work the owners of the means of production. The resultant antagonism finds its expression in a struggle for the distribution of

the total national product. As this struggle becomes conscious it gives rise to class interests and class conflict. The dominant minority tries to maintain and extend the opportunities for exploitation while the exploited majority continually strives to liberate itself. Gradually class interests develop into a system which embraces all life. They become intertwined with political, religious and even scientific interests. As these varied expressions of the class struggle become integrated they give rise to class ideals and to differences in class psychology.

The objective existence of class interests does not mean that these interests are always understood by the class itself. In fact, for a number of reasons, a class may be devoid of class consciousness; the inherent contradictions between classes may not become clear at once because economic processes go through several stages of development. There may be a temporary divergence between the general interests of a class and its temporary interests, and the latter may for a while dominate the situation. Moreover, the ruling classes usually try to influence the ideas and the psychology of the masses in order to destroy their consciousness of class interests. Class struggle, too, passes through various stages. There are periods when the antagonism of class interests is obscure and class conflicts are either totally concealed or of a minor character. Sooner or later, however, when the productive forces of society reach a point where their further development is obstructed by existing social institutions, the class struggle becomes acute and it is then that it becomes the main driving force of social reorganization.

Since the power of the ruling class is always concentrated in the organization of the state the oppressed class must aim directly against the mechanism of the state. Every class struggle is thus a political struggle which in its objectives aims at the abolition of the existing social order and at the establishment of a new social system. In order to prove capable of carrying through a social reorganization, however, the class must possess certain essential characteristics: it must be economically exploited and politically oppressed; it must be a producing class; it must be welded together by the conditions of its existence; and it must form a large mass or majority of the population.

All these characteristics, the theory maintains, are found in the industrial working population of the present day. It is for this reason that the industrial proletariat represents the only class

which can carry out a complete social revolution and reorganize society on the basis of the socialist ideal. The peasantry and the farmers lack most of these traits. But since the peasantry forms a large portion of the population in many countries it is essential that the industrial workers should ally themselves with the poorer elements of the peasantry.

Within each social class there are always a number of groups or subgroups which differ in position and ability. In order to unify the activities of a class it is necessary that one of these groups assume leadership. Such leadership can best be exercised by the organization of a political party which should represent the ideas and program of that section of the class which is most advanced, best schooled and most united.

Under contemporary conditions—the theory continues—the class struggle is assuming more and more the character of an alliance of the poor peasant masses and of the industrial workers against a financial oligarchy. Because of the growing internationalism of finance and industry the class struggle is also becoming more and more international in character, and will lead to a revolution on a world scale. This revolution will be violent, and its first step will be the establishment of class dictatorships throughout the world for the purpose of starting the work of socialist reconstruction. To promote this process the communists call for an accentuation of the class war and condemn all deviations toward “class collaboration.”

The very development and modifications which the theory of class struggle has undergone indicate the difficulties which it encounters. It is not easy to define a social class or to draw sharp lines of demarcation between various classes. No definitive division of society into classes can be made on the basis of the so-called factors of production, on the basis of the law of the division of labor or on the basis of source of income. The most that can be said is that there is a tendency toward the formation of economic and social groups and that their stratification and stability vary from one society to another in accordance with general economic and social conditions.

By implication the struggle of classes is also merely a tendency. In modern society the struggle of economic and social groups is fragmentary and intermittent, concentrated around major issues of immediate and perhaps of only temporary importance. Moreover, since the formation of a consciousness of general interests

is slow and intermittent, it is inevitable that economic groups which are closely related should sometimes struggle against one another as well as against opposing groups. Thus there are conflicts between various groups of employers and capitalists as well as divisions of opinion between various sections of the working class. It is also inevitable that economic interests should be overshadowed from time to time by cultural, religious and racial factors. Nationalism, as both an economic and a cultural phenomenon, tends to offset the formation of classes. Economically each nation is likely to regard itself as a unit with common destiny and common interests as against the other nations of the world. Culturally it tries to consolidate its economic coherence by means of national ideas and ideals which permeate all groups of the community. All these limitations of the class struggle exist in present day national and international affairs.

To the extent to which it manifests itself the struggle of economic groups is a potent factor of social change. Manifestations of group conflict, such as strikes, reveal stagnant or decadent conditions and serve as a stimulus to their elimination or amelioration. Nevertheless, whenever such conflicts in the industrial field are concerned merely with group shares in distribution, regardless of their effects upon the productive process or upon society as a whole, they may result in social detriment. In large social transformations the struggle of classes may lead to a harmful process of disintegration; this is true especially when the struggle is carried on between groups and classes which are in an early stage of economic and intellectual development. Such class struggles have often resulted in social crises which were followed by the development of a new national solidarity.

LEWIS L. LORWIN

See: SOCIALISM; COMMUNIST PARTIES; CONFLICT, SOCIAL; REVOLUTION; CLASS; CLASS CONSCIOUSNESS.

Consult: Pöhlmann, R. von, *Geschichte der sozialen Frage und des Sozialismus in der antiken Welt*, 2 vols. (3rd ed. Munich 1925); Marx, Karl, *Das Kapital*, 3 vols. (Hamburg 1890-94), tr. by Samuel Moore and E. B. Aveling (Chicago 1906-09), especially vol. iii, ch. iii; Bernstein, Eduard, *Die Voraussetzungen des Sozialismus und die Aufgaben der Sozialdemokratie* (Stuttgart 1899), tr. by E. C. Harvey as *Evolutionary Socialism* (London 1909); Adler, Max, *Die Staatsauffassung des Marxismus*, Marx-studien, vol. iv, pt. ii (Vienna 1922); Cunow, H., *Die Marx'sche Geschichts-, Gesellschafts- und Staatstheorie*, 2 vols. (Berlin 1920-21) vol. i, ch. i, vol. ii, ch. ii; Kautsky, Karl, *Das Erfurter Programm in seinem grundsätzlichen Theil* (11th ed. Stuttgart 1912), tr. and abridged from

8th German ed. by W. E. Bohn as *The Class Struggle* (Chicago 1910), and *Die Klassengegensätze im Zeitalter der französischen Revolution* (2nd ed. Stuttgart 1920); Lenin, Nikolai, *The State and Revolution* (Detroit 1924); Bukharin, N. I., *Teoriya istoricheskogo materializma* (Moscow 1923), tr. from 3rd Russian ed. as *Historical Materialism* (New York 1925); Lorwin, Lewis L., *Labor and Internationalism* (New York 1929); Man, Henri de, *Zur Psychologie des Sozialismus* (new ed. Jena 1927), tr. by Eden and Cedar Paul (London 1928); Sombart, Werner, *Der proletarische Sozialismus*, 2 vols. (10th ed. Jena 1924); Michels, Roberto, *Zur Soziologie des Parteiwesens in der modernen Demokratie* (Leipzig 1911), tr. by Eden and Cedar Paul as *Political Parties* (New York 1915) pt. iv, ch. i; "Theorie des Klassenkampfes, Handelspolitik, Währungsfrage" in *Vereins für Sozialpolitik, Schriften*, vol. clxx (1925) 9-86; Heimann, E., *Die sittliche Idee des Klassenkampfes und die Entartung des Kapitalismus* (Berlin 1926); Delevsky, J., *Antagonismes sociaux et antagonismes prolétariens* (Paris 1924), especially ch. iv; Beer, M., *A History of British Socialism*, 2 vols. (London 1921) vol. ii.

CLASSICISM primarily denotes certain qualities especially revealed in the art of Greece and Rome. Its essential elements are restraint, simplicity, dignity, serenity and repose. It is further characterized by perfection of form, based upon a unity in which the detail is subordinated to the whole, and clarity of conception, which springs from an imaginative rationality. The Greek adage "nothing too much" expresses the spirit of classical art as well as classical philosophy. The purpose of Greek art, especially, was to invest the universal with beauty. In this respect it differs from realism, which is more interested in the actual and particular and which seeks factual veracity rather than ideal beauty. This difference becomes apparent in a comparison of Hellenic portrait sculpture, which tends to reveal abstract conceptions of character, with Roman statues, which resemble much more closely the person represented. Classicism is objective rather than subjective since its universal conceptions were derived, rationally as well as imaginatively, from the world of impressions. Its abstract nature, however, gives it an element of repose and aloofness from the jarring and conflicting elements of life.

Classicism found its most perfect expression in Athens of the fifth century B.C. A number of factors rendered this period most favorable for artistic development. The victories over the Persians in the first part of the century had removed fear of invasion and had greatly stimulated the nationalistic spirit. There was an unprecedented outward expansion of Athenian power and the city came to enjoy its greatest

situations. Social force and social rules take the place of group conflict; mob frenzy gives way to discussion. But the growth of social habit can never prevent the operation of the dominant "mood" of a group; and as the methods for control of opinion become more effective and far reaching analysis of the roots of collective behavior is of increasing importance.

ROBERT E. PARK

See: SOCIETY; SOCIAL PROCESS; CUSTOM; TRADITION; CULTURE; CIVILIZATION; CONSERVATISM; RADICALISM; CHANGE, SOCIAL; CONFORMITY; CONVENTIONS, SOCIAL; CONDUCT; CONSENSUS; PUBLIC OPINION; COMMUNITY; ASSOCIATION; INSTITUTION; GROUP; CROWD; MOB; GANGS; REVIVALS, RELIGIOUS; LEADERSHIP; IMITATION; SUGGESTION; AGITATION; PROPAGANDA; DISCUSSION; EDUCATION; PRESS.

Consult: References in bibliographies of articles dealing with specific forms of collective behavior.

COLLECTIVE REPRESENTATION. *See* SOCIAL PSYCHOLOGY; GROUP.

COLLECTIVISM is the imposing word to be set over against individualism. It is, broadly, a term for a trend in social development, a program of economic reform, a theory of general welfare and a utopian order for mankind; technically, a general label for comprehensive schemes of authoritative control such as socialism, communism, syndicalism and Bolshevism; and specifically, a name for the trend away from the extreme *laissez faire* of the nineteenth century.

In a sense every social estate is a collectivism. The savage tribe hedges the doings of its members about with inviolate imperatives and tabus. The feudal regime assigns to each person a mode of life in conformity with the station to which he has been appointed. The tyranny enlists its subjects in His Majesty's service and exacts from them dues of grain, wine and labor. The dynastic state fashions people, resources and trades into an instrument of national greatness. The Christian society, for the glory of God and the salvation of the soul, extends a spiritual dominion over the actions, the words and the thoughts of men. In all such cases authority is from above and the individual is of less account than the impinging establishment.

The thing called individualism is a departure from—and a type of—collectivism. It is the product of the impact of novel event upon ancient authority. As Renaissance, Reformation and industrial revolution followed each other in startling succession, thought and activity could

no longer be pent up in accepted formulae. The scholar wanted to surprise truth in his own way; the God fearing man, to worship according to the dictates of his own conscience; the citizen, to be undisturbed in the exercise of his rights; and the merchant, to escape fostering restraints and to do as he pleased with his own. Practical men, such as these, asked only for a removal of particular restrictions. The times demanded no more than a release of spirit, mind and activity from outworn rule and form. But it was, for all its doubts, an age of faith in first principles, and the thinkers after their manner translated specific demand into abstract statement. The individual was the thing; self-interest was to public good as means to end; the actions of rational beings established and maintained society. Thus matters of common concern were transferred from the domain of man to the order of nature; thus too individual freedom became an instrument of organization. It was rested not upon right or privilege but upon social worth. Individualism was the way of an unplanned and undirected collectivism.

The new doctrine, "an atomic individualism" or "a natural collectivism," offered its challenge. It was easy to fasten a comfortable explanation upon actuality and to discover in the prevailing arrangements "the simple and obvious system of natural liberty." But as apologists came to defend as "free enterprise" or "capitalism" a homogeneous order such as never was, critics began to offer in "socialism" or "communism" a ready made hand-me-down substitute. When the state lost its omnipotence and the idea of democracy permeated reform thought, syndicalism and guild socialism became roads to salvation. The social utopia was a denial of the existing system, a replacement of the individual by the state, of freedom by authority, of the motive of gain by the spirit of service—and the trick was done.

The battle of ultimates was inevitable. Individualism was an expression of the philosophy of rationalism; collectivism went back to the authoritarian ideal. Alike they set down general welfare as the human goal, but in its definition a condition of well-being in society at large was opposed to an aggregate of the happiness of individuals. The one made man the hero and society the villain in the piece, the other crowded the state and the individual into the roles of father and child. In an evangelical clash, with absolutes as weapons, opposing argument was refuted more easily than defensive statement was

made secure. Man was not an enlightened being always capable of fending for himself, nor was he an ignorant person forever to be helped along the way. Human nature was not "a mechanism skilfully contrived to impel individual action to a divine purpose," but neither was it "a bundle of antisocial impulses." Nature, not God, or Providence, had so "contrived the frame of humanity" that one could not help himself "without promoting the common good"; but it was common knowledge that nature had done nothing of the kind. Authority hedged personal action about with arrangements which directed self-seeking to general ends, but evidence of such purposive compulsions was wanting. Thus it was, back and forth, endlessly, shrewdly, inconclusively. A last "it isn't that way" was met by a final "it can't be done." The popular victory of individualism was due not to good reasons or a worthy cause, but to the will to believe.

The argument, which could not be settled, gave rise to fertile inquiry. Admissions were made, "other factors" were recognized, exceptions obscured principles, the antithesis began to fade and a reexamination of social theory became necessary. The individual lives in society; each is inseparable from the other. Man is free to be, to choose, to do, within the limits of organized group life; he seeks worthy things—good name, wealth, achievement, personality, life—but always through social means; he depends for rich and varied opportunity upon a heritage of culture, the association of the likeminded and an organization of resources. The activities of the government instead of belonging in a province all their own permeate all human affairs. Business is not independent of government; property and contract, essential to its operation, are changing usages enforced by law. Authority is not limited to political control for man belongs as well to a moral, a religious and an economic order; upon him a host of formal and informal compulsions—customs, laws, traditions, associations, values, institutions, tabus—must of necessity impinge. The clash between individualism in general and collectivism in general is replaced by a myriad of distinct problems.

But understanding comes slowly, and circumstance rather than theory led the way toward an empirical collectivism. The state, which was supposed to keep in its place, thrust its will into private affairs. Self-interest is "the great regulator," but legislation has to be invoked against the farmer who keeps infected milk cows, the chemist whose dyes escape into a running

stream and the smelter who allows copper fumes to lay waste a countryside. The lure of profits puts shops in the right places, but cotton gins, merry-go-rounds and blast furnaces in the wrong spots are nuisances to be abated. Man is man and each for himself, but nature has wrought confusion with age and sex. Child labor must be prohibited. Women are unlike men; the long day causes fatigue and is a hazard to motherhood, and here a limitation of hours is a necessary exception. But men too are subject to fatigue; they are like women and are to be included in the exception. There must be no formal neglect of matters of general concern: state supervision is to insure sound banking; the trade in lottery tickets, white slaves and alcohol is prohibited; all are to be educated at public expense. The great prophets had said that "each shall count for one, and no one for more than one" and that "the greatest good of the greatest number" is the end of it all. It was the ironic fate of individualism to create in utilitarianism a standard by which its shortcomings were revealed. Instance after instance the obvious way to right a manifest wrong was an appeal to the government. Thus control from above took its opportunistic way through an individualistic system.

As from without so from within came a trend toward collectivism. In the whirl of change the individual lost his clear cut integrity and well defined province. The ingenious device of the corporation kept alive the fiction of "the private business" yet permitted the association of many kinds of property and many forms of personal service in a single enterprise. The use of trusteeship, the holding company and the interlocking directorate pyramided ownership, concentrated control, distributed discretion within a hierarchy of offices and confused the identity of the business unit with like and unlike ventures. In the domain of industry each functionary and factotum was free to do as he pleased—according to his position, within the established arrangements and in the face of circumstances not of his making. Even corporate personality, through which the individual lingers on, is a gift of the state.

In the realm of industry the resort to collective action is becoming common. The trade union exists "lawfully to further the legitimate objects of its members." Rules of apprenticeship, intolerance of the "scab" and methods of acting in concert make of the union card a pecuniary asset not inaptly described as property.

The firms within an industry, as a precaution against cut-throat competition, establish gentlemen's agreements, research bureaus, societies of manufacturing chemists, iron and steel institutes and cement protective associations. A plethora of rotary clubs, chambers of trade and commercial fraternities furthers the cause of bigger and better business. Farmers, through cooperatives, attempt to impose direction upon a chaotic industry and restraint upon their disorderly ranks. Individuals, firms and corporations may affiliate with "societies for mutual benefit" or stay outside at their peril. An increasing number of voluntary associations imposes an imperfect discipline upon persons still legally free to do as they please.

Association has brought with it a growing use of collective devices. Merchants set up credit bureaus; banks establish clearing houses; advertising, auditing, promotion and what not are entrusted by many firms to a single specialist. The device of insurance enables a common provision to be made against the risks of death and of fire. The reform of work accident indemnity once sought only to give the workman the right of recovery possessed by the stranger; now compensation is "a necessary cost of production" assessed against the industry. Employment is no longer an arrangement between individuals; in organized trades its terms emerge from collective bargaining between the parties; and in unorganized trades the employer, a collective personality, lays down the conditions and the individual workman may take or leave the job. Without such collectivistic devices business could not be carried on.

Within industry a system of use and wont is emerging. A code of rules is beginning to govern hiring and firing; a job is a gift of a closed union or of a personnel test; discharge demands its own due process. Each industry, formally open to all who will take its chances, has its admission requirements which run in terms of capital, endurance, knowledge, policy and occasion. Business possesses in usages which center in the office and the market its own procedure for getting questions settled. It is, unlike the state, quite tolerant of the radical; he may depart from convention in making goods, handling employees or selling wares so long as he keeps expenses below receipts and obeys the general law of solvency. The minority by reducing costs and lowering prices may even force its advanced methods upon the conservative majority. The price system, from whose tyranny there is no

escape, has its ceremonial; bankruptcy has its effective way of sentencing the unfit. It is because they are of their own kind, quite unlike the familiar compulsions of government, that the conventions of business are little noticed.

Opinion is making a lagging adjustment to the collective character of business. The belief that the system works automatically is giving way to the demand that it be kept at work. An army of potential buyers must be stimulated by salesmanship; automobiles, typewriters and sewing machines must be pounded into junk; fashion and fad must rob goods of their worth before they wear out—or the flow of new goods will be blocked and plants cannot run at capacity. High wages promote spending and keep industry going; unemployment means workers without purchasing power. The reduction of wages and the laying off of men is a dubious remedy for hard times. The dawning responsibility of "the system" for the welfare of individuals rests upon business necessity. The gears must be made to engage; the making and the using up of goods must march along together; a great instrument of production which is "a concatenation of interlocking processes" must not be allowed to slacken or to stop.

In fact, almost unobserved there has appeared the great collectivism of business. Its technical activities have already been socialized. Funds, laborers, equipment, materials and brains are drawn together into establishments; productive units are gathered into none too orderly industries; industries are agglomerated into a crude and wasteful system. The business structure which envelops industrial activity is as yet inarticulate. The business unit has a clear cut identity; the industry has only such integrity as "the natural process of competition," kindly assisted by voluntary association, can give; the economic order, such as it is, is almost a by-product of innumerable individual and group activities. The scheme of authority over the industrial system is still inchoate. In the business unit lines of discretion are clearly marked out; in an industry individuals, firms, organizations and interests have their uncertain places in a scheme of direction; in the economic order, which knows nothing of potentate or council of wise men, a complex of controls holds sway. The state, charged with numerous duties, here and there exercises a negligent oversight. The market, over and behind all, works as well as it works in giving form and purpose to the everyday work of a people. In the cooperative enter-

prise each person has his place: to it he brings his mite of service or of property and from it he takes the wealth and the waste which make up his living. Apart from the great industry the individual cannot live his life; from its semi-responsible dominion there is no escape.

The domestication of business to social ends involves a protracted struggle along a scattering front. The narrow choice between overneat organizations has been succeeded by a complicated problem in detailed adjustment. The prevailing disorder invites an attack industry by industry. Each form of activity needs to be assigned to the appropriate agency: the rearing of children to the family, the defense of the nation to the government, the manufacture of shoes to business. But such words as family, government and business point directions rather than describe patterns of control. In business the ways in which the steel, the lumber, the newspaper and the amusement industries are put together make very different pictures; in government the postmaster general, the University of Michigan, the board of public works, the Port of London Authority and the Emergency Fleet Corporation are distinct types of control. The quest runs back of simple words like free enterprise, regulation and public ownership to the devices and procedures which make up an organization. Each separate activity—building, coal mining, street cleaning, preaching the gospel, banking—demands a scheme of arrangements in keeping with its technical processes and serving the purposes for which it exists. The way of order for an industry is one of endless choice.

There is need as well for a general attack upon specific failures in performance. The regulations set up to insure quality to the ware, service to the consumer, security to the investor, protection to the worker and opportunity to the management may well apply to many trades. The great hazards of life—sickness, accident, unemployment, old age—demand a collective provision which cuts across industrial lines. As technique develops, common sense changes, wants are revised and instruments of direction are remade, the scheme of control must respond. In time a more responsible business system may relieve the state of its current industrial functions. The arrangements for keeping business in order demand a continuing attention.

In the immediate future there is little hope for an articulate and responsible control of business. A barrier lies in a lingering application of individual terms to group activities. In law we speak

of the principal, the employer and the corporation as if they were persons; in economics an entrepreneur, once an owner manager, now a tangle of relationships, survives to obscure reality. We continue to talk of private property, free enterprise and individual initiative, when these institutions are to be found only in the backwaters of great industry. We persist in speaking of an alternative between "leaving" an activity "to the individuals concerned" and "the government's taking it over," when the real choice is between one set of human arrangements and another. Nor is outworn language, which confuses analysis, the only obstacle. At present direction over a myriad of separate and interrelated activities is scattered far and wide; each person whether of high or low estate is far more concerned with his own affairs than with everybody's business; the immediate, the specific and the personal are forever present to divert attention from larger and more lasting values. The culture we know, rich in particular activities and speeding toward an unknown future, cannot be made to obey a fixed purpose. In a world of human behavior and man made arrangements there is no escape from taking a chance alike upon personnel and upon institutions. We seek an order in which a collectivism that was never intended is subdued to the useful and the good; we must be satisfied with an approximation.

The commitment to collectivism is beyond recall, but its form remains to be determined. Its coming brings to social organization not an answer but a host of questions. The neat and tidy systems, in spite of a simple evangelical appeal, provide no escape from the road of detailed and painful adjustment. Experience quickly reveals behind the mask of comprehensive schemes like socialism, communism and Bolshevism the specific problems of functions, industries and interests, each one of which demands its particular attack. The collectivism that is, whether of business or the commune, will continue to receive such purposive revision as the concern of all sorts and conditions of men with their own petty affairs will allow. In a culture that lives and grows an empirical collectivism can never be reduced to the clear cut lines of a blueprint.

WALTON H. HAMILTON

See: INDIVIDUALISM; LAISSEZ FAIRE; RATIONALISM; UTILITARIANISM; AUTHORITY; STATE; SOCIETY; SOCIAL PROCESS; ECONOMIC ORGANIZATION; CONTROL, SOCIAL; BUSINESS; CAPITALISM; ASSOCIATION; VOLUN-

SYMBOLISM; COLLECTIVE BEHAVIOR; IMITATION; CONTINUITY, SOCIAL; LANGUAGE; WRITING; PRESS; PUBLIC OPINION.

COMMUNISM. The term communism, which is derived from the Latin word *communis*, does not occur before 1840, although the concept it embraces is as old as civilization itself. It was coined in the secret revolutionary societies of Paris between 1834 and 1839 and in a short time replaced such terms as community of goods, agrarian laws or *communauté*. Its general use is to describe the practise of or belief in the desirability of the social control of economic life, including the social ownership of property. It is distinguished in a technical sense from socialism, which means the social ownership of productive goods, in that it generally includes ownership of some or all forms of consumers' goods as well. In addition to this historical and general meaning the term communism in the years 1840-72 came to imply revolutionary action for the violent overthrow of capitalist society. Socialism, on the other hand, was the term used to describe constitutional activities for the reform of the economic system in the direction of national control of the means of production. Between 1872 and 1917 the two terms were looked upon as synonymous, or rather the term communism disappeared. With the rise to power in 1917 of Bolshevism in Russia the old distinction between the two terms was revived and sharply accentuated.

Underlying the general concept of communism are three basic doctrines. The first is that of the state of nature, or *jus naturale*, which in varying forms dominated the thought of antiquity and of the modern world from the Renaissance to the mid-nineteenth century. This doctrine is essentially utopian, rationalist and pacific. The second doctrine is Manichaeism, which considered human history as a ceaseless contest between two sovereign powers—good and evil, spirit and matter, light and darkness. Since private property riveted man to worldliness and materialism, he could overcome evil only through its renunciation and asceticism. The Manichaean doctrine, an Iranian offspring of Hellenic gnosticism, has points of similarity with primitive Christianity, which likewise regarded material possessions as an obstacle to salvation. All movements against private property and ecclesiastic officialism from the third century through the Middle Ages were more or less Manichaean; they were essentially ethical, antinomian, peacefully anarchic. The third

doctrine is Marxism, or the economic theory concerning the rise and development of the productive forces of capitalist society, its inherent collectivist tendencies and antagonistic interests, with the class war as the human dynamic power of civilization. Philosophically Marxism rests on an inversion of the Hegelian dialectic evolution of the universe. Since the latter half of the nineteenth century it has been more or less the working hypothesis of international social democracy and since 1903 the orthodox doctrine and living faith of Bolshevik Russia.

Communism formed an integral part of the ancient myth of the golden age, the idealization by civilized man of the primitive, "natural" or tribal stage of human history. It was a reaction from the growing complications of ages of transition from nature bound existence to cultural exertions characterized by a more settled agricultural life, more intensive tilling of the soil, use of metals, rise of towns, growth of arts, crafts, trade and commerce, differentiation of society into various ranks with discordant interests and with wars against neighboring groups. Classical literature abounds in sentiments favoring the primitive and in longings for the simplicity of the golden age.

Beginning in the fifth century B.C. the Greeks set up as an ideal the laws of the legendary Lycurgus, who was supposed to have restored economic equality and healed the distempers of the Spartan state—poverty and riches. Plato, seeking to discover the causes of the disastrous Peloponnesian War, the decline of his country and the deadly class conflicts and feuds of Hellas, looked back and saw the past of Greece bathed in the golden rays of the harmonious state of nature, in which there was neither riches nor poverty, injustice nor strife. He became the age's foremost protagonist of communism. Plato argued that political democracy, which Pericles had glorified as affording to each citizen a share in the commonwealth, had failed to create harmony and civic virtue. The healing of the state must start with the restoration of harmony, and this could be effected only by establishing community of goods so as to afford to each citizen a real share, a stake in the lands of the commonwealth. In addition, Plato maintained in his *Republic* that the state needed a governing class of the highest quality of men and women. This was to be produced by a conscious selection for breeding and by thorough physical, moral and intellectual training. The selected

ruling class should own all things in common and all personal interests were to be subordinated to the welfare of the state. When the inhabitants of the state felt and thought as a unit, when the rulers were philosophers, then the state would flourish. In a later work, *Laws*, he expressed doubt as to whether community of goods and women had ever existed or would ever exist but advocated an approach to the ideal. Lands and houses were to be redistributed, but citizens should not cultivate their fields in common since the latter demanded a moral standard hitherto unattainable. Nevertheless, each recipient of an allotment was to think of his land as a portion of the common property.

The writers and philosophers of fourth century Greece seem to have been greatly preoccupied with the problem of the communal form of life. The notion had two formidable opponents in Aristophanes, whose *Ecclesiazusae* is an outspoken, spicy satire on community of love; and Aristotle, whose arguments in his *Politics* against his teacher's *Republic* constituted the most complete attack up to that time on what is now known as communism. On the other hand, the foundations of the doctrine of the state of nature were first laid in the same century. Aristotle relates with astonishment that opinions were spreading that "the rule of a master over slaves is contrary to nature and that the distinction between slave and free man exists by law only and not by nature; and being an interference with nature is therefore unjust" (*Politics*, I: 3; English translation by B. Jowett, 2 vols., Oxford 1885, vol. I, p. 5-6). This was the beginning of the revolutionary theory that not only had men been free in the golden age but that they were in fact free, servitude being the violation of a law superior to all constitutions and civil laws. While there had always been a higher or holy law it was conceived as originating in some divinity and subject to interpretation by priests. The new view traced such a law back to nature, if a divinely inspired nature, and made it subject only to the interpretation of philosophers. An important distinction is involved. The new views of nature as social legislator were co-ordinated at the beginning of the third century by Zeno, the master of the Stoa, who embodied them as a social science theory in a system which, as stoicism, influenced Roman and later European thought to a degree that can hardly be overestimated. It spread the doctrine that all men issued from the hand of nature peaceful and good, free and equal; that private property was

not known in the state of nature; that the remedy for all moral and social ills was to live in harmony with nature, to return to nature. Zeno outlined an ideal world state, in which mankind lived in liberty and equality, without state laws and, as far as may be inferred from literary fragments, which mention no provision for a medium of exchange, probably also with community of goods. A disciple of Zeno, Sphaerus the Borystenite, roused the Spartan king Cleomenes to his egalitarian land reform; another stoic, Blossius of Cumae, tutored Tiberius Gracchus and encouraged him in his agrarian agitation.

The Romans, among them Vergil, Horace and Ovid, made frequent use of the doctrine of the golden age. Roman statesmen and historians viewed the German tribes beyond the Rhine as enveloped in the luster of moral superiority shed by the state of nature. Julius Caesar related that the Suevi had "no private or separate holding of land," and of the Germans in general that "no man has a definite quantity of land or estate of his own," and that partly to prevent inequalities and to keep down the passion for gain they changed their habitations annually (*Gallic War*, IV: 1; VI: 22). In practise, however, stoics and those influenced by them were anything but hostile to private property and the accumulation of riches. Even those who glorified the golden age did not follow Horace's advice to throw their "jewels, gems and gold into the nearest sea" (*Odes*, III: 24, 45-50).

A broad current of *jus naturale* sentiment flowed from Rome through the empire at a time when old religious and ethical principles were being recast. It penetrated the movements which created the primitive church. What was with most Romans a poetic adornment became with many salvation seeking Jews a principle for the arrangement of daily life. The Jewish sage Philo of Alexandria wrote with admiration of the Essene practise of benevolence, equity and community in goods. Josephus Flavius shared his opinion and stigmatized Cain as the seeker of possessions, the Hebrew root *kn* signifying to acquire, to buy. The general effect of the Sermon on the Mount was that accumulated wealth shut its possessor out of the kingdom of God, while voluntary poverty was blessed and had a quasi-sacramental character. Under the personal influence of Jesus and His apostles many wealthy Jerusalemites shared their goods with the poor and all were "of one heart and of one soul . . . they had all things common" (*Acts* IV:

32). While Roman jurists eliminated "community of goods" from the definition of *jus naturale*, the fathers and doctors of the church were of opinion that in the original state of man the earth and the fulness thereof were held in common. The definition of *jus naturale*, as given by Saint Isidore of Seville, contains in addition to other specifications these two: *communis omnium possessio* and *omnium una libertas* (*Etymologiarum*, v: 4, 1). Gratian, the first compiler of canon law, brought together with delight the views of Christian writers in favor of community of goods (*Decretum Gratiani*, 1: Dist. 8, Dist. 88; 11: Causa 12, qu. 1, c. 2, a). Of the great fathers Saint Ambrosius declared that "... nature has poured forth all things for all men for common use. God has ordered all things to be produced, so that there should be food in common to all and that the earth should be a common possession for all. Nature therefore has produced a common right for all, but greed has made it a right for a few" (*De officiis ministrorum*, 1: 28, 132). Saint Jerome even accepted the widely current saying that the rich man is either unjust himself or the heir of an unjust parent. Statements of this type are frequent, but as a whole they do not prove that the primitive Christians, church fathers, doctors and canon lawyers strove for any sort of a communist rearrangement of society. Even the primitive Jerusalem communities had only a communism of consumption and not of production; each member worked as a private individual, sharing his produce or earnings with his fellows. Adverse pronouncements against private property amounted only to an admonition to Christians not to be addicted to worldly pursuits but to subdue avarice and share surplus wealth with the needy. They relegated community of goods to the region of the ideal, sanctioning private property on the theory that since the fall from grace avarice has created separate dominions and laws are necessary to regulate the division of possessions and to protect the weak against violence which would prevail were a return to the system of community of goods attempted. This admittedly led to a division of society into rich and poor, but the church view was that divine and natural law made it incumbent on the rich to relieve the poor from destitution.

The movement toward justification of private property began early. Tertullian and Saint Ambrose refer to the fall of man, to original sin, as the cause of his sinking to a lower moral level.

Saint Augustine, while accepting community of goods as a part of the state of nature, condemned the antiproperty doctrines of Pelagius and the Manichaeans and sternly reproved the revolutionary rising of the agricultural laborers (*circumcelliones*) in north Africa. These tendencies grew in strength as town civilization revived. Aristotle's philosophy prevailed over that of Plato. It found expression in the *Summa universae theologiae* of the English schoolman Alexander of Hales (d. 1245) and was adjusted to the economic and political conditions of the day by his younger contemporary, the Aristotelian Saint Thomas Aquinas, who set the economic doctrines followed by the Catholic church to this day.

Not all Christians, however, could adjust the teachings of Jesus or their own communist sentiments to the exigencies of civilization. The communist influence persisted in the East and in Egypt. Oriental mystics, given to a contemplative life, looked upon the renunciation of property as an indispensable condition of subduing evil. The mass of the dissatisfied Christians branched off into two movements, one heretical, the other monastic. The former took up a hostile attitude toward the church, charging it with worldliness and mechanical legalism. Among their sects, branded by the fathers as heretical, were those of Basilides, Valentinus, Carpocrates and his son Epiphaneus, the gnostics and later the Manichaeans, some of whom not only demanded the renunciation of property but set up as a positive aim the establishment of communism. Similar views were held by non-Christians. In the age of Christ the neo-Pythagoreans formed settlements in southern Italy, where ascetic communism was practised. Among the neo-Platonists communistic tendencies were rife; and one of their foremost teachers, Plotinus, the fellow student of Origen, used his influence with the emperor Gallienus in favor of the establishment of a communist colony to be named Platonopolis. Toward the end of the fifth century a mass movement against the landed nobility, led by the communist Mazdak, occurred in Persia.

Heretical sects, antinomian and antiproprietarian, became rather large in the first centuries of this era. With the spread of monasteries, however, mass heretical movements disappeared from view. The monasteries or cenobia (from the Greek *koinos bios*, community life), cloistered from the temptations of the world, sheltered all Christians who withdrew from material

pursuits to spend their life in ascetic self-discipline and community work. They must have also absorbed all those elements which in the absence of such a place of refuge would have turned heretical.

The situation changed in the eleventh and twelfth centuries. The church had become a world power and popes were statesmen engaged with emperors in a contest for supremacy. As the monasteries lost their fervor and were drawn into world affairs, heresy reappeared. At the turn of the twelfth century numerous sects known by the generic term Cathari (from the Greek *katharoi*, pure) had gained a footing in the trading centers of western, central and southeastern Europe and their doctrines were spread in part by the mass movements of the crusades. They sought to reorganize their religious, ethical and social life on a primitive Christian basis. Among them were the Patarins, the Poor of Lombardy, the Poor of Lyons, Waldenses, Albigenses, Bogomoli, Arnoldists, Humiliati, Communiati, Textores. Most of the Catharist sects lived austere lives, accepting gnostic-Manichaean doctrines and probably also the teaching of Joachim de Floris. Common to practically all were evangelical poverty, resistance to the worldliness of the church and monasticism and the rejection of official Christian sacraments, dogmas and authority. That many strove for communism may be seen from the statements of their persecutors. Of the Cathari of Montforte, near Turin, who were persecuted in 1030 on account of their rejection of the ecclesiastical mode of life, it is related that they declared *omnem nostram possessionem cum omnibus hominibus communem habemus* (*Monumenta Germaniae historica, scriptorum*, vol. viii, 1848, p. 65, line 44). The French theologian Alanus, in his *De fide catholica contra haereticos*, charges the Cathari with having appealed to the law of nature which dictates that "all should be in common" (Migne's *Patrologiae latinae*, vol. ccx, p. 366). The English prelate Walter Map reported of the Waldenses *huius certa nusquam habent domicilia, . . . omnia sibi communia* (*De nugis curialium*, ed. by M. R. James, Oxford 1914, p. 61). The Inquisition and special crusades, the German emperors of the twelfth and thirteenth centuries, the popes and the Dominicans, combined to exterminate these sects with fire and sword. Particularly thorough was the work performed by the Inquisition in France, and for centuries to come no social heresy could strike root there.

Thus when Europe was rent by a series of peasant wars the heresy of the *Jacquerie* in France was practically the only one which raised no demands for social reform. In the English Peasant War Wycliffites preached of Plato and proved by Seneca that "all things under heaven ought to be in common" (William Langland, *Piers Plowman*, Early English Text Society, Publications, original series, vol. xxxviii, 1869, ch. xx, line 274). In the Hussite wars in Bohemia the Taborites preached communism, and in the German Peasant War Thomas Münzer and the Anabaptists did likewise; the war had an epilogue in a communist rising at Münster.

The Renaissance and the age of the discoveries reconnected European social speculations with those of antiquity. Cosimo de' Medici established a Platonic academy, in which Marsilio Ficino taught Platonism and neo-Platonism to scholars from northern Europe, among them John Colet, who introduced Sir Thomas More into the study of the *Republic*. In humanist circles there was much sympathy with community arrangement of life. Erasmus, one of the most influential scholars of his time, declared that the true Christian should consider all his earthly goods as community goods. More's *Utopia* greatly heartened the humanists, who thought that societies could be constructed on a model invented by right reason and according to the tenets of *jus naturale*. The communist influence of Platonism was fortified by the effects of the discovery of America and the Atlantic islands. The tribes found in those regions appeared to live in a state of nature. To many travelers, writers and jurists the American tribes were a visual demonstration of the truth of *jus naturale*. Vespucci reported in his little tract *Mundus novus* that in the Canary Islands the people lived "according to nature; property they have none, but all things are in common."

The humanists did not see that western European society was moving in swift currents in the direction of individualism rather than of communism. More's *Utopia*, in fact, closed a period in which the doctrine of community of goods was still invested with some authority. In 1536, the year after Sir Thomas More's execution, Thomas Cromwell issued an injunction against teaching scholasticism and canon law. Henceforth the law of nature came increasingly to mean a protest against state interference with the course of trade and commerce, which were supposed to be governed by their inherent laws.

To the French physiocrats the law of nature meant freedom from state regulations, equality before the law, security of property. Even where the state of nature doctrine was used in the old sense it was bound up with the social contract and was directed not against property but by the representatives of property against feudal privileges and personal monarchy, as in the English civil war and on the eve of the French Revolution. From More's day until the middle of the nineteenth century communism meant only utopian writing or romantic experiments, generally by emigrant groups in overseas lands. Among those who produced literary utopias in those centuries were Andreae, Bacon and Harrington in England, Campanella in Italy and Morelly, Fourier and Cabet in France. Their later imitators have generally been regarded as little more than romancers. Jesuit settlements of Indians in Paraguay from 1610 to 1758 were the first of the long series of communist experiments in America which were to fill the history of pre-Marxian communism. They were inspired by a combination of missionary zeal and *jus naturale* views derived from the schoolmen and canon law. Other attempts to found communist colonies, such as those of the Fourierists, Owenites, Icarians, anarchists and other groups, although some were economically and socially successful for as long as a century, have generally proved impracticable in a world where the surrounding masses of population live in a totally different fashion. Nevertheless, this strain of communist thought continues to be the basis of some small settlements today, especially in the United States, and among Zionist settlers in Palestine.

On the extreme wings of both the English and the French revolutions were, however, small minorities who clung to the old notion of *jus naturale* and communism. These were Gerrard Winstanley and the Diggers in England, peaceful and mystical, and Gracchus Babeuf and his fellow conspirators in France, revolutionary, atheistic and the originators of the idea of a revolutionary dictatorship as the most effective instrument in the policy of abolishing private property and the building of a communist democratic state. The ideas of that conspiracy were transmitted by one of its principal authors, Filippo Buonarroti, to the young generation of Frenchmen who in the thirties of the last century worked in the Paris secret organizations either for a republic or for communism. The idea of the revolutionary communist dictatorship was spread by Auguste Blanqui, leader of

the Paris secret organizations after 1836, and later it inspired Karl Marx, on whose teachings modern communism is largely based.

During the nineteenth century rising socialist and land reform movements referred to the works of scholars such as Georg Hanssen, J. M. Kemble, August Haxthausen and Georg L. von Maurer to prove the existence in earlier ages of agrarian communism as a form of social organization, seeking therefrom further justification for their positions. Furthermore, as a result of Friedrich Engels' study of Lewis H. Morgan's work, Marxian views of the development of property were connected with the history of primitive communism. Ethnologists and economic historians began after 1875 to reexamine the origins of property in land. Primitive agrarian communism, hitherto generally accepted as a fact, came to be one of the most debatable problems of economic history and ethnology. Among those who have defended the notion that primitive agrarian communism was a reality are, in addition to those mentioned, such great scholars as Erwin Nasse, Sir Henry Maine, Émile de Laveleye, William Stubbs, Lewis H. Morgan, Otto von Gierke and Maxim Kovalevsky. They believed that they found corroboration of their opinions in the statements of Caesar and Tacitus concerning the Germanic tribes, in travelers' reports of social conditions among primitive populations and finally in the Russian *obshchina*, the south Slav *zadruga*, in some remnants of the *Mark* system in southwest Germany, in the Swiss *allmende* and in the Chinese well-field-system (*Seïds*, or *Tsing-Tien*).

The opposing school, led by Fustel de Coulanges, attempts to prove either that from the beginning of human history there existed private property and no other form or that where collective agricultural associations existed they were a late creation arising from external pressure, e.g. in the case of the *obshchina* and *zadruga* from the desire of governments or feudal authorities to impose upon the whole village or a number of families collective liability for taxes or rent. The most scholarly part of the controversy turns upon the original conditions of the Germanic tribes, and closely connected with it is the question of whether the Anglo-Saxon settlement in pre-Norman England proceeded on Roman or Germanic lines. Max Weber, with his encyclopaedic knowledge of the social sciences, declared in his last work that the theory of primitive agrarian communism could neither be proved nor disproved (*Wirtschaftsgeschichte*,

Munich 1923; tr. by F. H. Knight as *General Economic History*, New York 1927, p. 24-25). The effect of the controversy has not been barren of results, however, since it has made the adherents of the theory less dogmatic.

Whatever the truth of the theory may be, Marxian communism does not depend on it for justification. Nevertheless, Marxian communism reflects the same sentiments which underlay earlier communist movements based on a theory of primitive communism or the reign of *jus naturale*. With such movements modern communism shares a position consisting chiefly in the repudiation of private property in production and consumption goods and a demand for a fundamental, radical reconstruction of society as the only means of achieving harmonious and ordered social existence. The particular turn which communist thought and practise have since taken was dictated by communist views of capitalist industrial society. Modern communism has become instead of a myth or the subject of literary romance a practical goal and program in the form of Marxian socialism agitated by international socialist groups and regarded by them as the inevitable next step in social development, to be brought about by a class whose self-interest drives it to such a type of economic and social organization.

MAX BEER

See: SOCIALISM; BOLSHEVISM; COMMUNIST PARTIES; COMMUNISTIC SETTLEMENTS; UTOPIAS; NATURAL LAW; STOICISM; CHRISTIANITY; FRANCISCANS; SECTS; RELIGIOUS ORDERS; MONASTICISM; POVERTY; EQUALITY; PROPERTY; VILLAGE COMMUNITY.

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duction. Yet these little communities had of necessity to participate in methods of taxation, of exchange, of investment, and, where outside labor was hired, of remuneration, which were current in that larger society and which were in many particulars diametrically opposed to their own. It is not surprising, therefore, that it took a unique combination of factors to permit any one of them to exist for long, and that communistic settlements have remained separatist in nature and circumscribed in influence.

DOROTHY W. DOUGLAS

KATHARINE DU PRE LUMPKIN

See: COMMUNISM; SOCIALISM; ANARCHISM; UTOPIAS; OWEN AND OWENISM; FOURIER AND FOURIERISM; BROOK FARM; MENNONITES; MORMONISM; RELIGIOUS ORDERS.

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COMMUNITY. Historically considered the interpretation of the term community has evolved from a simple to a complex conception. As originally used in the literature of the social sciences community designated a geographical area with definite legal boundaries, occupied by residents engaged in interrelated economic activities and constituting a politically self-governing unit. Thus hamlets, villages, boroughs, towns and cities were considered to be communities; and such communities, in turn, were thought of as being parts or fragments of larger societal units such as counties, states, nations. It will be seen that this conception of community was derived primarily from ideas of structure: a geographical area, a system of interrelated economic institutions and an independent framework of government. The newer conception of community, on the other hand, is derived principally from ideas of process. This conceptual evolution came as a consequence of general social change by which communities were significantly influenced and as a result of the introduction of newer disciplines, especially those derived from psychology, into the thought of social scientists.

Certain social trends operative for some time may be said to have become specific in direction during the last half of the nineteenth century. The factory system became corporate and projected itself beyond community boundaries;

manufacturing establishments were located in definite geographical areas but were owned by many stockholders living in other communities. Commodities were no longer produced for local consumption. Craftsmanship on the part of workers became less and less essential as machines and mass production methods increased; consequently laborers became more mobile: they moved more readily from one community to another. At the same time means of communication—railways, street cars, highways, automobiles, telephone, telegraph, etc.—improved rapidly, tending to make the local community more flexible and less self-contained. Just as observers were beginning to recognize the emergence of a new type of local community, due to those and other economic, technological and social changes, social scientists were at work revising their concepts. They began to interpret social processes in terms of human nature; the dynamics of society were seen to reside not in its structure but rather in the interests, wishes, desires and purposes of individual human beings interacting with other human beings in varieties of social groupings. The local community therefore came to be viewed as one of the types of social grouping in which human nature and its impulsions were expressed, while the origin of these impulsions and the principal conditioning factors in their expression were thought to be psychological.

As a consequence of the two trends mentioned above, new meanings and shades of interpretation were added to the concept of community. If, for example, community is to be regarded as a process term describing how human beings interact, why is it not synonymous with the concept of society? Some theorists, accepting this point of view, have come to use the term community in this societal sense. Others, influenced by the rise of social psychology, wish to reserve the term for the more positive aspects of social interaction; they designate all forms of association in which wasteful conflict has been eliminated and in which the associational processes appear to produce plus values, in so far as human nature is concerned, as communities. Political scientists still view the community, both as structure and as process, in terms of the ways in which governmental forces arise from social interactions. Social workers continue to regard the community from two points of view: as a configuration of families and as a system of institutions designed to exercise social control and assume social responsibilities.

A sound definition of any term will of course include both structural and functional elements. A combination of the two following definitions might make the concept entirely clear. A community, if we define its explicit elements, is any consciously organized aggregation of individuals residing in a specified area or locality, endowed with limited political autonomy, supporting such primary institutions as schools and churches and among whom certain degrees of interdependency are recognized. This definition will include hamlets, villages, towns and cities. A community, if we define its implicit elements, is any process of social interaction which gives rise to a more intensive or more extensive attitude and practise of interdependence, cooperation, collaboration and unification. This latter conception omits all consideration of locality or other spatial terms and directs attention to the processes by which socialization takes place, processes which are in essence psychological. In a logical sense these two definitions cannot be conjoined, since one points toward structure and the other toward function; we may, however, think of these two attributes of reality together, that is, as structure-function. Perhaps most ordinary thinking about communities includes both concepts, and for this reason the logical difficulty is not important.

The margins or boundaries of a local community can never be precisely designated since more than one center invariably exists. Some sociologists have attempted to utilize the category of economic interest as the significant center: calculating from the premise that all persons who produce, sell and buy goods within a given area are by that token members of a given community they have endeavored to draw the boundary lines in such manner as to include all such persons. Others have essayed the task of describing the local community in terms of other interests, such as religion, education and recreation. Still other investigations have proceeded upon the theory that membership in a community derives from a conscious sense of "belonging"; if, for example, people state that they belong to this or that community, it should be taken for granted that they may then be included within this or that community's boundaries.

None of the above attempts to describe the local community in accurate spatial terms is likely to prove satisfactory; the fact that experience and interests flow from more than one center, that our economic and social processes become increasingly flexible and that improved

modes of communication tend to multiply and expand the possibilities of interaction combine to make community boundaries fluid and indefinite. But in spite of these difficulties the local community as the nexus of functional interaction remains an important category for the social sciences.

Within the local community and functioning primarily in relation to the community as a whole one discovers the most significant forms of human association. First among these is the family, the propagating unit of society; marriage, family rearing and home making represent processes which may fairly be said to condition the total quality of social experience. Then there is the neighborhood, which may be considered as a cluster of families together with a few institutions; within the neighborhood unit children secure their first generalized social expression and adults carry on most of their sociable activities. In metropolitan communities neighborhoods tend to disintegrate, but most communities may still be described as patterns of interrelated neighborhoods, each representing a different quality of social life and each consisting of interrelated families. And as an antisocial index it is worth noting that so-called "gangs," or criminal groups, evolve on a neighborhood basis. The established institutions of a given society also function community-wise; thus churches, schools and secret societies exist as local units; those primary adjustments which all persons make to the institutional controls of society are therefore a part of that sphere of experience which belongs to the community. And, finally, in all modern communities one discovers the rise of new social forms which may be called functional groups. These so-called functional organizations are voluntary associations; each is based upon some distinct human interest or group of interests. Thus there are chambers of commerce and manufacturers' associations organized to enhance the interests of their members; likewise there are trade unions designed to advance the interests of the workers; these two are simple forms of functional groups, but numerous other types exist and new ones are continually arising. The real community process, that is, that sphere of interactions which results in effective social control, may be said to reside in these functional groups; they are already more powerful in essence than combinations of families, neighborhoods and institutions.

The status of an individual in a modern community derives from his relationship to func-

tional groups. His personality and his interests are effective in so far as represented in organized forms; the unassociated individual loses both status and functional capacity. Indeed, it may be said that a modern urban community progressively becomes a web of organized interests; the community process, in turn, comes to be that complex of interactions which proceeds from organized interests. It is to be noted that in rural areas, villages and smaller cities the community process is still more closely related to family, neighborhood and institutional factors. From the point of view of social control, or of "social engineering," it becomes increasingly obvious that attention needs to be directed toward those skills, techniques, procedures and methods according to which these functional groups arrive at decisions, prosecute their respective projects and interact with each other. It is at this point that the two concepts of community, the structural and the functional, converge: the community is an aggregation of individual human beings living within numerous types of groupings; the level of community experience depends upon the quality of social interaction which characterizes each of these groupings, and their consequent interrelationships.

It should be noted at this point that these various functional groups which now exercise so much influence upon local community affairs all tend toward extracommunity expansion. They furnish opportunities for primary social experience within the community setting, but they also tend to project this experience outward. This fact does not diminish the significance of these groupings—the manner in which they give the meaningful clues concerning specific communities—but it does indicate that even here the local community tends toward dispersal and not toward intensification.

Some of the trends which appear to characterize contemporary community development need to be noted, since communities and their processes are in perpetual flux; comprehension of the concept of community depends upon insights concerning the ways in which communities change and evolve. These changes may be most briefly expressed in a series of categorical statements. Modern communities, especially urban, tend toward occupational rather than neighborhood development; each section of the community is coming to be used for a special economic purpose. The distances between residence, place of work and place of recreational

and sociable activity tend to increase as means of transportation are improved. Functional groups are coming to represent all vital interests and their variety, number and influence are increasing steadily. Secondary means of communication are reducing social relationships to more impersonal levels. Community populations tend toward greater mobility. Finally, experience within a community, due to separation of residence from work and to multiple functional organizations, tends to become fractional; that is, the total personality is less known to any group and has less opportunity for expression. These trends are of course characteristic of cultural evolution in the whole of so-called western civilization. Communities are in one sense initiators of cultural change and in another sense they become merely the reflections of deep seated, changing forces in cultural systems. The degree to which changing communities may be regulated and guided with respect to desirable goals remains the problem of the social sciences.

E. C. LINDEMAN

See: SOCIETY; SOCIAL PROCESS; GROUP; NEIGHBORHOOD; FAMILY; VOLUNTARY ASSOCIATIONS; ECOLOGY; HUMAN; COMMUNITY ORGANIZATION; COMMUNITY CENTERS.

Consult: MacIver, R. M., *Community* (3rd ed. London 1924); Tönnies, F., *Gemeinschaft und Gesellschaft* (7th ed. Berlin 1926); Lindeman, E. C., *The Community* (New York 1921), and *Community Conflict* (New York 1929); Follett, M. P., *The New State* (Boston 1920); Steiner, J. F., *The American Community in Action* (New York 1928); Anderson, Nels, and Lindeman, E. C., *Urban Sociology* (New York 1928); Lynd, R. and H., *Middletown* (New York 1929); Wood, Arthur E., *Community Problems* (New York 1928); Daniels, John, *America via the Neighborhood* (New York 1920); Burr, Walter, *Small Towns* (New York 1929); Brunner, Edmund de S., *Village Communities* (New York 1927); Sanderson, Dwight, *The Farmer and His Community* (New York 1922); Brunner, Edmund de S., Hughes, G. S., and Patten, M., *American Agricultural Villages* (New York 1927); Douglass, H. P., *The Little Town* (new ed. New York 1927); Hinds, W. A., *American Communities and Co-operative Colonies* (rev. ed. Chicago 1908).

COMMUNITY CENTERS. The community center may be defined as a meeting place where people living near by come together to participate in social, recreational and cultural activities and build up a democratic organization that will minister to the needs of the community. The social philosophy out of which it grew has been concerned with the promotion of community solidarity and the development of a sound community life.

The term community center began to come into general use about 1915 as a new name for the social center, which had attained considerable popularity during the decade prior to the World War. The modern emphasis upon social centers arose in connection with the work of social settlements and institutional churches. But there was no widespread interest in the movement until the opening of the present century, when school buildings in New York and a few other cities began to be utilized by people living in their vicinity for adult education classes and recreational programs. Impetus was given to these experiments by the establishment in Rochester, New York, in 1907 of school social centers with an elaborate program of community activities, which included discussion of civic problems, the organization of clubs of different kinds and provision for recreational features. Similar centers were organized in other cities, and in 1911 the movement had gained sufficient support to make possible a national conference on social centers and the completion of a national organization known as the Social Center Association of America.

During the next few years the term community began to gain wider currency, and as a result of the growing interest in the community as a social unit the National Community Center Association was organized in 1916 by those most actively concerned with the promotion of school centers. Under the influence of the rapidly expanding community movement social centers were renamed community centers, although this did not involve any essential modifications of their activities. This community use of the school plant was given great popularity during the World War through the efforts of the Council of National Defense to make the school the headquarters for the promotion of war work. A popular slogan at that time was, "Every school house a community capital and every community a little democracy." Thousands of local community councils of national defense were established and these for the most part carried on their activities in school buildings.

Since the war schoolhouses have in general been readily available for community activities, but only in a small minority of schools are community center programs operating as a regular feature of community life. The most recent survey of school community centers in 1924 revealed that there were 1569 centers open as often as once a week for two or more activities other than night school, or open for one activity other

the United States the insurance departments of the state governments exercise only a most casual supervision over the making of rates. In over half of the states not even the filing of rates is required, and when power over rates is given a board or official it is generally only that of approval. The usual standard to which rates must conform is that of adequacy, supplemented sometimes by the requirement of reasonableness, but there are many states that have no standard at all. Only in the state of Texas does the public authority make and enforce its own rates. The regulation of reserves is more stringent. The uniform liability loss reserve law adopted in twenty states requires the maintenance of a reserve equal to obligations on policies over three years old discounted at 4 percent and to 65 percent of the earned premium (less payments already made) on policies less than three years old. The regulation of production expense has so far been attempted only in New York, but in matters of insurance regulation the influence of the insurance commissioner of this state is so far reaching as to be almost nation wide. The restrictions which he has approved have not yet been entirely successful, but the trend of the times will demand for workmen's compensation the same restrictions as are already imposed on life insurance.

Public liability insurance has been less affected by legal developments than employers' liability and workmen's compensation insurance because liability for injuries to members of the public is still governed more or less by the old law of negligence. With minor exceptions public liability insurance acquired independent importance only with the introduction of machines in transportation, building and other exposed industries. It was the increasing use of the automobile more than any other single factor that stimulated the expansion of public liability insurance. The first automobile liability policy was written in England in 1895, and the first automobile property damage policy in the United States in 1898. At present automobile liability and property damage (liability) premiums represent about one third of the aggregate casualty premiums in the United States, and the present trend points to further rapid growth. Thirteen states in this country and two Canadian provinces have already enacted some form of semicompulsory or compulsory automobile liability insurance. An interesting recent development in compulsory automobile insur-

ance is the suggestion that the principle of compensation without fault be applied to indemnification for automobile accidents. The numerous other public liability and property damage (liability) coverages available at present (see CASUALTY INSURANCE) are comparatively insignificant even in the United States, where they have reached their highest development. In 1929, for example, the net premiums for public liability and property damage other than automobile did not exceed 9 percent of total casualty premiums. Technically the various public liability lines closely resemble employers' liability and compensation insurance: they are written by the same carriers; rates and reserves are computed on the same principles. Important differences affecting rates and reserves are that while the compensation policy has no face, public liability forms have definite limits for injury to a single person and for total payments on a single accident and that a very important part of the public liability policy is the promise to defend suits against the insured, many of which are groundless and exaggerated.

C. A. KULP

See: INSURANCE; SOCIAL INSURANCE; NEGLIGENCE; EMPLOYERS' LIABILITY; WORKMEN'S COMPENSATION; HEALTH INSURANCE; AUTOMOBILE INSURANCE.

Consult: United States, Department of Labor, *Workmen's Compensation Insurance and Benefit Funds in the United States*, Twenty-third Annual Report (1910); United States, Bureau of Labor Statistics, *Comparison of Workmen's Compensation Insurance and Administration*, by Carl Hookstadt, Bulletin no. 301 (1922); Downey, E. H., *Workmen's Compensation* (New York 1924) chs. v and vii; McCahan, David, *State Insurance in the United States* (Philadelphia 1929); Michelbacher, G. F., and Nial, T. M., *Workmen's Compensation Insurance* (New York 1925); Kulp, C. A., *Casualty Insurance* (New York 1928) pt. ii; Michelbacher, G. F., and others, *Casualty Insurance Principles* (New York 1930); United States, Department of Labor, *Workmen's Insurance and Compensation Systems in Europe*, Twenty-second Annual Report, 2 vols. (1909); Cohen, Joseph L., *Workmen's Compensation in Great Britain* (London 1923); International Labour Office, *Compensation for Industrial Accidents*, Studies and Reports, ser. M, no. 2 (Geneva 1925); Manes, A., *Die Haftpflichtversicherung* (Leipzig 1902); Hertzfelder, Emil, *Haftpflichtversicherung* (Berlin 1914); Kirkpatrick, S. V., *Insurance of Public Liability Risks* (London 1924).

COMPETITION is a term in social theory which associates the fact of a struggle with the function of order. It is the key word in an account, real, abstract or fictitious, of how rivalry for prestige and income, for power and wealth, comes to promote organization. It is by compe-

tition—whether of persons, firms, industries, nations, races, beliefs, habits or cultures—that the fittest survive; individuals, instruments and institutions of different capacities are given places in a going society; and an industrial system, whose personnel passes, materials decay and arrangements change, is adapted to new conditions. Competition is at once a process of selection, an economic organization and an agency of social development.

The genus, of which competition is a belated sport, is rivalry. The fact of rivalry is universal in life and in society. It is manifest in a struggle between germ cells for a chance at life; plants, for sunlight and growth; bats and beavers and elephants, for food and mates; and kind against kind and like against unlike, for a foothold on the earth. It is evident in the strivings which attend the round of everyday activities; one against another, bakers contend to provide wholesome bread; undertakers, to give peaceful rest to the dead; salesmen, to break down resistances; scholars, to surprise truth and make contributions to knowledge; and uplifters, to do good. It appears in every social order under which men have lived; in the conflicts of tribes for unhappy hunting grounds; of holy men, for the glory of saying the most prayers; of barons, for castles on the Rhine; of merchant adventurers, for the spoils of the East; and of capitalists, to bag the largest profits and to establish the biggest and best foundations. As event follows event into history a machine process wins its way against ancient crafts; a novelty called business displaces custom and authority in the control of industries; a fresh interpretation is read into the established law; a modern creed replaces outworn dogma in dominion over the human mind. If all the world's a shifting stage, rivalry distributes the ever changing parts among the ever new players.

Competition is rivalry subdued into organization by rules of the game. Nature after centuries of creative effort produced no such scheme of arrangements as the competitive system. No great convention, called to consider how industrial activities might be put together, contrived such a constitution for the economic order. It grew up at a time when the mediaeval regime of prelate and baron, of fief and glebe, was passing; it was essentially the product of petty trade. Into its making there went an element of choice, apparent in a few big decisions. The older way of authoritative control was rejected because of the mischief it had done; monopoly was unac-

ceptable because of the threat it carried. But there was no conscious judgment to abandon status, to establish contract, to transform landed into commercial property or to replace custom with the market in the making of prices. For the most part, such arrangements just grew up. They represent the accommodations of a myriad of men, in a million places high and low, to their own little necessities; they are the survivals of a series of chance judgments. The general features which characterize competition came into existence long before its elements were remarked or put together into a mental picture.

In spite of haphazard growth a structure may be discovered within the competitive system. It consists of two pairs of institutions: private property and contract; profit making and freedom of a trade. The usages of private property determine who is to hold and to control the various resources of society; the usages of contract, how persons, instruments and materials are to be brought together in the productive process. Together property and contract supply the mechanics of competition. The lure of profits draws individuals and corporations into industry and impels them to produce and market goods. The openness of an industry to all who care to take its chances prevents monopoly and limits money making to reasonable gains. The bait of profit is beacon and guide; the freedom of the trade is brake and governor. Together they direct industry, keep it orderly and adjust it to a changing social order.

Yet in no industry is competition as simple, mechanical or articulate as this. Each of the four institutions is a compound of many usages. The right to property is a bundle of equities, such as a voice in control, an interest in disposition and a claim to income, which may be put together into many permutations. An ownership of the old homestead in fee simple is one thing, the agglomeration of privileges which make up the ownership of a great railway system quite another. A shift in demand, the revision of a statute, an innovation in technology or a change of management may affect the character of a right or rob property of its value. The right of contract, once thought of as a voluntary agreement between equals, is a changing thing; it has been remade by the rise of the corporation, the coming of business and the growth of large scale production. At present many bargains with all their conditions are proposed by one party and accepted or rejected by the other. The profit motive appears in many forms; the corn grower

and the automobile manufacturer, the baron of steel and the baronet of coal, may be equally devoted to their own pecuniary interests, but the arts of money making which they practise are very different. All trades may at law be equally open, but in fact they are buttressed about by very different barriers against the intruder. Competition is too living to know a set pattern; the current organization of the shoe industry did not prevail at the turn of the century; the competition of grocers who vie for trade on the same street is unlike that of the cotton planters of twelve states who sell in a world market. The competitive system is sprawling and conglomerate as well as neat and orderly; it is contrived of institutions, each of which is prone to depart from its type; its operation depends upon men quite unlike each other in intelligence, knowledge, foresight and judgment. As a product of inconsequential growth it is a part of all that it has met. The norm may well be there, but a tangle of colorful detail confuses the simple lines of its structure.

Accordingly, a single explanation of competition is hardly to be expected. As with every attempt to run an abstraction through a mass of human behavior, the subject invites varied and conflicting statements. In popular writing, which is voluminous, competition is not distinguished from free enterprise, laissez faire and capitalism, and judgments are passed upon it as if it were a synonym for the prevailing economic order. On the one hand, competition is the gigantic motor which has caused nearly everybody to use his mental and physical powers to get ahead; it develops in the individual the habits of self-reliance, deliberation and eager, interested, universal watchfulness; it is that reconciliation of men to productive processes which issues in the largest aggregate of wealth. It is in alliance with morality, gives to a man material goods only upon condition that he become something of an idealist and allows him plenty only when he is personally capable of abstinence. It has lifted our race to a standard where the mode of living of common laborers is more comfortable and desirable than the everyday existence of the kings of whom Homer sings. On the other hand, competition is a nice new name for an ugly, brutal fact of all against all, without plan or system, without pity or mercy; it is a metamorphosis of the protean genius of graft; it is not law, but lawlessness; carried to its logical outcome it is anarchy or the absence of law. It is hymned by penny-a-liners and

philosophers as the god of all society; perhaps there is competition among the angels and Gabriel and Raphael have won their ranks by doing the maximum of worship on the minimum of grace. It might well inspire an epic on the consecration of cannibalism.

In professional thought competition is isolated and reduced to abstract statement. The economists were captivated by the Newtonian physics which, for the moment at least, had brought law, order and economy into the world of nature. So, with little thought of deliberate borrowing, they set about creating a mechanics of competitive business. To this end they employed a bit of observation, a goodly amount of abstraction and a bountiful measure of the most rigorous logic of the day. They made price—or value—the focus of their attention, selected buying and selling as the essential phenomena to be studied, disentangled the market process from general industrial activity and sought out the principles of the economic order.

The crux of the matter was to them the problem of economy. Its basic terms are a population of insatiable wants and a world of stubborn and inadequate resources. Out of the gifts of nature goods and services are to be produced which satisfy the demands of men; since there is not enough to go round, the wealth of the community must be made to go as far as may be. The result is a great productive system, with the market in the foreground, through which resources are painfully converted into pleasure giving goods. The actors are human beings, impelled by the utilities which articles of consumption possess to overcome the disutility of personal effort. Each must take his mite of service or his property to market and fetch away the wherewithal of his living. In the market goods and services are all tagged with prices and personal wealth comes by way of careful and shrewd calculation. In disposing of goods and services each has to compete with others who have like goods and services to sell. In seeking what one would have each has to bid up against others who would take it away. As a result value is a sovereign in the great competitive economy; an upward dart of price or a downward drop allows those who will pay most to purchase, gives a market to those who will sell for least and effects a neat adjustment between supply and demand. Under the double competitive process of seller against seller and buyer against buyer it cannot well be otherwise. For if it chances that a price is too low to effect a balance, a flood of bids

speeds it to the proper level; and if too high, a host of offers brings it down. The domain of competition is almost universal. The march of invention opposes new wares to old: motor busses to street cars, electric refrigerators to ice, radio to the phonograph. Wants even vie to create a competition between unlike goods: a modern car and an antique couch, an evening down town and a Sunday in the country are rival claimants upon one's income. With price as a guide competition continuously accommodates the production of goods to the changing demand for them. A delicate structure of responsive prices must keep on effecting the best mediation that may be between the wants of the people and the productive capacity of industry. The self-seeking individual is forced to have a thought about the community; acquisition is endowed with a social purpose. Thanks to the economic harmonies, there is no fundamental antithesis between competition and cooperation; competition is the way of cooperation.

There is, in short and in the abstract, a competitive order of economic forces acting of themselves and by themselves. The industrial system is an automatic self-regulating mechanism which must continuously secure from a niggardly nature just such goods as yield the largest surplus of pleasures over pains. It is a Newtonian economic system wherein matter is replaced by wealth, attraction and repulsion give way to utility and disutility, the phenomena of the market like those of the heavens are given an equilibrium, a system of checks and balances keeps the machine in order, and the theory of the conservation of energy finds a parallel in the law of the economic maximum. At the deft hands of the theorists competitive activity was converted into an account which was at once the great explanation and the great apology.

An abstraction easily becomes a norm to which reality must correspond. An ideal competition finds its counterpart in a policy of competition for a going industrial system. Accidents, tricks of one kind and another, combinations, frictions great and small, whatnots which will not fit in, are discarded as no part of competition. In the here and now—not *in vacuo* or by benefit of *ceteris paribus*—a practical competition gives assurance of order and economy to the affairs of industry. Its regime promotes efficiency in organization, economy in resources, fairness to the interested parties and orderly development in business. It tends to make each establishment in an industry tight and tidy, to

fit establishments neatly together into industries and to articulate industries into an orderly system. It allows little tolerance to waste; the producer who would survive must give constant thought to cutting his expenses and must keep his house in order. Accordingly, the ventures which together make up an industry cannot continue to absorb more laborers, use more materials or claim more investment funds than are necessary. Its rule safeguards the interest of the consumer. No seller can persist, against others who would have his market, in palming off low quality goods or in selling wares for what they are not; nor can he keep on charging more than the traffic will mercifully bear. Since the producer is ever alert to costs there is a constant spur toward progress in the industrial arts; since advances in technology quickly become common property the consumer is the lasting beneficiary of discovery and invention. The rule of competition insures to the workman the true and full value of his service; and reasonable arrangements in regard to hours, safety, health, discipline and hiring and firing. He is free to take or leave work in a shop, offer his services to a rival firm or hawk his labor in another industry. Finally, with some friction but without extravagant waste, competition accommodates an industrial system of many changing elements to the novelty in demand and circumstances which change brings. All in all a decentralized system is far preferable to the way of authority. It is far better to take a chance on a multitude of little judgments, made by interested parties, properly checked and balanced, than upon a few big decisions.

As fact, theory and policy, competition-as-it-is and as-it-is-set-down-in-books invites a varied attack. Critics, according to their several bents, are disposed to dispute its assumptions, to insist upon its limitations and to question its working. A first count, leveled against postulates, is an aspect of the prevailing skepticism. As a general challenge the critics wonder if industrial phenomena lend themselves easily to mechanical analogy; if a uniformity and a purpose have not been given to an inchoate mass of human activity; and if an alien explanation has not been driven where it does not belong. They inquire whether simplicity and symmetry are not of the mind rather than of things, a fashion in truth long since outworn. From this they proceed to more specific doubts. Are men in industrial activities impelled exclusively or even primarily by self-interest? If they are, has self-

interest an economic objective? And, if it has, can it be written down in pecuniary terms? Are the myriad of human judgments upon which the operation of the system depends adequately grounded in knowledge, reason and foresight? Are materials, funds and labor responsive enough to direction to give the controlled flexibility which the working of the system requires? Will the march of time and unwilling events be kind enough to allow intent to be realized? Is the process that converts a host of petty decisions into a competitive order at work free from serious hazards? Here the essence of the matter is the start of the argument. As these questions are differently answered, the competitive system becomes to different students a reality, a norm, an abstraction, a hypothesis, a myth and a fiction.

A second count is directed at the pretentiousness of the competitive explanation. It aims rather to limit the province than question the rule of competition. The system works, not automatically but in response to human judgments; in any enterprise what is done depends upon where discretion lies. In different business units bondholders, owners of shares, directors, managers, underofficials, laborers and investment bankers have very different places in the scheme of control. Since each group has an interest of its own not identical with that of the concern the making of policy knows no set procedure. Nor is the way of discretion straight and narrow. A lack of knowledge of the business or of the industry makes for mistaken judgments. Oftimes a cake of custom makes management so much a matter of routine that a chance obtrusion of competition becomes a disturbing influence. The fear of losses and the promise of gains lead rivals to see merit in brotherly understanding; thus in many matters agreements come to replace the answers given by the operation of competitive forces. The state, departing from an ideal of non-interference, thrusts its regulatory will into the domain of private business. But even a qualified competition does not extend to the confines of the industrial system. Combination is not unknown in the land; railroads, telegraphs, telephones and waterworks bear only vestigial marks of a competition that is gone; the waning domestic industries are still under family control; and many important undertakings, such as the national defense, the maintenance of roads and the provision of education, are under the auspices of government. In short, a competition that will not run true to type has been com-

promised by a confusion of ends, by custom, by understandings and by interference from without; and the uncertain domain of a compromised competition shades off into monopoly, public utilities, household economy and state enterprise.

A third count is aimed at the competitive system at work. A test of theory by reference to facts is difficult. There are no certain standards by which the quality of its operation may be judged. Competition does not assure measurable results; the promise is only of getting as much as may be out of the resources and effecting the best mediation that may be among conflicting interests. As yet the facts that can be brought to judgment are a mere handful. The studies of its actual operation are far fewer in number than the accounts of how competition is supposed to work. But though available facts cover a mere fragment of industry they reveal a serious discrepancy between ideal and actuality. The consumer has his case: the quality of the ware is uneven and below standard, the sum he pays is in excess of the necessary costs of production, and a fitful price divides users into the favored and the unfavored. The laborer has his complaint: working conditions seem to be dictated by unenlightened self-interest, rates of wages defy explanation in terms of the laws of price, and existing standards of life are not adequate livings. The industrial engineer cannot easily reduce the competition-that-is to an orderly diagram: establishments keep on being wastefully run; bankruptcy claims the unfit but reorganization keeps them going; a potential capacity to produce is vastly in excess of market demand; shops, plants, factories and mines are jumbled into untidy industries. It is only crudely, irregularly, wastefully and with much suffering that businesses are accommodated to changing circumstance.

If specific studies fall short of an indictment at least they reveal a lag in economic organization. A scheme of arrangements which grew up amid the conditions of petty trade is hardly adequate to the great industry. The presumptions which underlie competitive policy do not belong to the world of the machine process, the corporation and quantity production. In the small town the tradesman can keep one eye on his customers, another on his rivals and both on his own shop; in the great industry customers are distant markets, an understanding of the industry demands a research organization, and the ups and downs of business depend upon factors

which lie at the ends of the world. In the small town the conditions of trade stand out in clear cut relief; all costs are direct, price is a guide to production, a gradually increasing unit cost prevents untoward expansion and insures sound growth. In the great industry each hides from his fellow his sales strategy, overhead costs click on with the clock, a diminishing unit cost tempts to expansion, and an overdone capacity makes for disorderly growth. In the small town an occasional improvement is made in an ancient craft; as its use becomes general there is time for an easy accommodation. In the great industry invention and discovery appear and take their turbulent way through the economic system. A competition adapted to the deficit economy of petty trade may fail to serve the surplus economy of big business.

In like manner competition has invited the attention of those who would do something about it. One group demands that it be preserved, pure and undefiled, in all its native simplicity; another would eradicate the evil, root and branch, and substitute for it a moral economic order. But since the shortcomings especially remarked have been in specific performance, the general demand has been to mend the system and make it work. Revision has been a labor of love for those who would retain competition yet help it over the hard places and make smooth its going. Its arrangements have been modified from within. Business men, through trade, industrial and commercial associations, have aimed at only so much of cooperation as will make competition less ruthless and more rational. Farmers, resolutely opposed to monopoly in all its forms, have organized cooperatives to escape the tyranny of an uncontrolled market. Laborers have used the trade union only to secure a bargaining power equal to that of employers. If the state has interfered in private matters, the use of formal authority—to conserve natural resources, to set up weights and measures, to insure the quality of the ware, to fix hours of labor, to provide compensation for accidents, to distinguish "fair" from "unfair" competitive practises, to determine a plane of competition and to establish great industrial codes—leaves the rival firms in an industry as free to compete as before. In the wake of collective action and state intervention there appears a regulated competition.

The integrity of competition is not proof against such amendment. An up to date competition which has a moral code, rules of the game

and an umpire is not the old fashioned competition of each for himself and the devil take the hindmost. Even if rivals continue to be free to vie for custom, the matters brought under direction are no longer determined by resort to the ordeal of the market. If quality, hours and compensation are rescued from the play of economic forces and placed under authoritative control, wages, prices and performance might well follow. As item after item is withdrawn, competition ceases to be the great arranger of economic affairs. A voluminous literature is concerned with the possibilities of a controlled competition. In it a formal authority, such as the government or an economic council, is alike to determine quality, service and price and to fix wages and working conditions. Since neither consumers nor laborers may be exploited rival traders can earn profits only by improving technical processes and reducing the expense of waste. Hostile critics, conscious of its vanishing domain, have referred to the new competition as an engaging name for a novel sort of collectivism.

A constructive effort has been made to maintain competition. The free competition of the books has been paralleled with the enforced competition of the courts of law. In its dependence upon contract lies an inherent weakness in the institution. So long as buyers want goods and sellers are willing to accept dollars, liberty of contract gets things done and promotes order. But on occasion the lure of the same dollars makes it to the advantage of producers to agree among themselves to control capacity, to regulate output and to stabilize prices. Again the state is invoked, this time to make rivals compete. Freedom of contract is to be allowed along the vertical line, between buyer and seller; but it is to be prohibited along the horizontal line, between buyer and buyer and seller and seller. It is to be allowed where competition makes insecure the gains; it is to be prohibited where agreement is used to secure the gains. As long ago as the reign of Elizabeth there were statutes against monopoly; a comprehensive code against the restraint of trade has become part of the common law; the states of the union have attempted by statute to protect the good people against combinations; and in the Sherman, the Clayton and the Trade Commission acts the national Congress has read enforced competition into the law of the land.

The statutes in behalf of competition invite a study in law enforcement. A violation of an act and a sentence of conviction are separated by

many barriers. An overworked department of justice may never get around to the case. The evidence, in the possession of persons who have an interest in concealing it, may not be forthcoming. A clear violation of the spirit of the act may not be comprehended in the letter. A maze of legal issues, upon any one of which the decision may turn, may divert attention from the main question. A complicated procedure of exception and demurrer and appeal, of review and re-review, of questions of fact and of law, may in the end wear the case out. Over a period of forty years the administration of the federal antitrust acts has resulted in an insignificant number of penal sentences, the collection of only a few million dollars in fines and the confiscation of a few cartons of cigarettes illegally shipped in interstate commerce.

A translation of an economic policy into legislation is always an uncertain adventure; the words of the antitrust statutes have not been free from peradventures. At one time the none too definite standard of the rule of reason was set up as the test of whether or not monopolistic practises fell afoul of the law [Standard Oil Co. of New Jersey et al. v. U. S., 221 U. S. 1 (1910)]. At present activities of trade association that stop measurably short of price fixing are within the tolerance of the courts [Cement Manufacturers Protective Association et al. v. U. S., 268 U. S. 588 (1925)]; but agreements among competitors to maintain prices, even though they be reasonable and impose no additional burden upon consumers, are under the ban [U. S. v. Trenton Potteries Co. et al., 273 U. S. 392 (1926)]. In the British dominions, on the contrary, rivals may take reasonable precautions against cut-throat competition, and English law has no place for "a rule of possible evil" (Attorney-General of the Commonwealth of Australia v. Adelaide S. S. Co., 1913 A. C. 781). It is not without significance that many cases under the Sherman Act have arisen out of small scale business and that conspicuous victories for the statute have been won in outlawing practises of trade unions. If legislation has helped toward the preservation of competition the result must be due not to effective and vigorous enforcement but to the devotion of captains of industry to the spirit of the law.

A thousand trends which attend the coming of the new industrial revolution are amending the individual competition of petty trade into an organized competition within and between great industries. A competition, never so pure or

prevalent as assumed, is likely to be further compromised by acts of the state; it is more likely to be transformed by the growth of a scheme of formal control within business itself. It may well lose its identity in an authoritative economic order which will come to replace the state, just as the state replaced the church, as the dominant agency of social control. In any event the devices and procedures, the understandings and arrangements, which make up competition are being remade by changing circumstance; presently only a surviving sport will tell of an institution that once lived, inspired schematic economics and perplexed its critics. Its place and function are to be taken by some scheme of control for subduing conflict into organized struggle, for in any future ordering of human affairs, however backward, revolutionary or utopian, rivalry must have its place. Only in such a non-economy as heaven, where celestials are free from wants or there is a surfeit of all good things, can it be absent. The parties, the forms, the fashions, the rules, the intensity and the ends of struggle may change; but the norm of competition among persons, goods, industries, ideas, institutions and cultures must remain.

WALTON H. HAMILTON

See: ECONOMICS; ECONOMIC ORGANIZATION; INDIVIDUALISM; CAPITALISM; PROPERTY; CONTRACT; FREEDOM OF CONTRACT; LAISSEZ FAIRE; UNFAIR COMPETITION; MONOPOLY; TRUSTS; COMBINATIONS, INDUSTRIAL; GOVERNMENT REGULATION OF INDUSTRY; RATIONALIZATION.

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COMPOSITION. *See* LAW.

COMPROMISE is that mode of resolving conflicts in which all parties agree to renounce or to reduce some of their demands. A compromise, in contrast to a dictated solution such as is involved in coercion and conformity, implies some degree of equality of bargaining power. The agreement involved in compromise is also to be distinguished from that involved in integration. In the former case each party is able to identify

veloped by Condorcet. He viewed the history of mankind as a progressive evolution marked by successive stages in the advancement of knowledge and approximating ever more closely the ultimate aim of society, the achievement of absolute equality of rights—equality of the rights of individuals and equality of the rights of nations. Condorcet worked out a system of a social mathematics which would reduce the historical process to the operation of laws as “necessary and constant” as the laws of natural science. He was one of the first to proclaim the idea that the purpose of studying history was to discover these laws of social progress and through them to direct the future course and development of humanity.

In his *Essai sur l'application de l'analyse à la probabilité des décisions rendues à la pluralité des voix* (Paris 1785) he simplified probability calculus in order to facilitate its use in testing the justice of court decisions, the degree of correspondence to facts in decisions of legislative assemblies and the relative merits of electoral systems. Although he wrote much on economic problems and on politics he made no original contributions to these subjects. His discussions of political problems were in the manner of a constitutional lawyer as well as that of a political philosopher. He accepted the current views on natural rights and popular sovereignty and was a strong individualist. In his economic views he followed closely the doctrines of the physiocrats, especially those of Turgot.

Condorcet was more of a pioneer in other fields. He enthusiastically advocated woman's suffrage and the equal rights of men and women on the ground that, like men, women were “susceptible to moral ideas and capable of reasoning from them.” He also was convinced of the equal intellectual capacity of the sexes except in the highest forms of science and philosophy. Unlike his radical contemporaries he had advanced views on the family. He favored equality of husband and wife before the law, civil marriage, divorce and birth control. Like all the *philosophes* he was violently anti-religious. He regarded religion as a gigantic system of hypocrisy operated by knaves who “frighten their dupes by means of mysteries.” His hatred of Christianity flares forth in most of his writings but it is not clear whether he was a deist or an atheist. In the report on popular education which he submitted to the Legislative Assembly he recommended the establishment of a national system of free education of all grades

with coeducation, instruction in science, physical education, special schools for gifted children, moral instead of religious instruction, and schools for adults. This report was the basis of the education law passed by the Convention and was the inspiration of the succeeding educational reforms of Napoleon, Guizot, Duruy, Ferry and Buisson.

Condorcet's writings, while voluminous, did not have a popular appeal. His style was turgid and rhetorical and his thought abstract. His suggestions were, however, exceedingly fruitful to others and were of particular importance in shaping the positivism of Comte and the socialism of Saint-Simon.

J. SALWYN SCHAPIRO

Works: *Oeuvres complètes*, ed. by A. C. O'Connor and M. F. Arago, 12 vols. (Paris 1847-49); *Correspondance inédite de Condorcet et de Turgot, 1770-1779*, ed. by Charles Henry (Paris 1883).

Consult: Robinet, J. F. E., *Condorcet* (Paris 1893); Alengry, F., *Condorcet, guide de la révolution française* (Paris 1904); Cahen, Léon, *Condorcet et la révolution française* (Paris 1904); Fabre, J., *Les pères de la révolution* (Paris 1910) bk. x; Morley, John, *Critical Miscellanies*, 4 vols. (London 1886-1908) vol. ii, p. 163-255; Flint, R., *Historical Philosophy in France and French Belgium and Switzerland* (New York 1894) p. 325-39; Bury, J. B., *The Idea of Progress* (London 1920) ch. xi; Schapiro, J. S., “The Esquisse of Condorcet” in *Essays in Intellectual History* (New York 1929) ch. x; Vial, F., *Condorcet et l'éducation démocratique* (Paris 1903); Caillaud, Eugène, *Les idées économiques de Condorcet* (Poitiers 1908); Todhunter, I., *History of the Mathematical Theory of Probability* (London 1865) ch. xvii; Sée, Henri, *L'évolution de la pensée politique en France au XVIII^e siècle* (Paris 1925) pt. v, ch. ii.

CONDUCT is a general term for the relation between the human organism and its environment when this relation is looked at from the point of view of the organism itself. What an individual suffers from the environment is not conduct, but the way he bears up under it or reacts to it is conduct. In spite of the apparent specificity of stimuli the organism's career is continuous and becomes, willy-nilly, something of a piece, although at times a highly variegated piece. Conduct is, in a word, the plotted curve of behavior. The fact of the curve is determined by the inherently active nature of the organism; but the form of the curve is determined by the nature of the environment. The ancient and persisting notion of instincts as the source of conduct has at least this permanent truth, that human beings are subject to classifiable internal urgencies. Even these pressures, however, cannot be adequately described without external

reference. The quests for food and for whatever shelter is indispensable become basic determinants of the form of behavior. But it is clear that, due to the helplessness of the human infant and its differentially long infancy, it is the social environment that early plays the major role in canalizing the amorphous native impulses. The social environment sets standards and invites judgment. The most simple judgment will be general and dualistic: action that is, or is not, done; conduct becoming, or unbecoming, a lady or gentleman. But these simple moral dualisms break up easily into cultural pluralisms; and age and sex standards get diversified into class, occupational and aesthetic standards approaching complete individualization as a limit.

The degree of stratification varies between primitive and civilized cultures, though perhaps not as greatly as was once supposed. Certainly sophisticated peoples are more custom bound than they like to admit; and it may well be, as Radin and others have recently argued, that the apparent homogeneity of primitive cultures gives way to a more differentiated pattern as civilized observers become more sensitive to both their own ignorance and the anthropological data. Nevertheless, as division of labor progresses and at last eventuates in industrial society, the number of subclasses of the great groupings operates to give a fluidity to conduct unobserved in primitive society or even in strictly agricultural societies. Throughout history religion has exercised a double influence: by its emphasis upon works it has followed "the reality principle" toward diversity; but by its emphasis upon faith it has sought through a formula to "save" the individual from disintegration and at the same time to maintain by the picture of a homogeneous society in an after life the actually dissolving social unity. A society characterized by minute division of labor witnesses also the recession of the influence of such religion as emphasized the brotherhood of man here and a common home with the father hereafter—a patriarchal or early group picture; and the rise of a philosophy of life that would make possible a total reintegration of the personality of highly specialized workers would mark the moral goal of modernity. Somewhere inside the former picture and this side the latter, conduct now runs in an age of science.

The feelings that cluster about occupational and other groupings, when these feelings become ideational, serve as standards. The most general of them hang over from earlier groupings

as vague ways of sensing things, influencing overt behavior in all probability very little but making quite a difference in the tone of life: a present gentleman is ghost of a past "gentle" man, a present villain, of a past "villain." Actually canalizing the flow of energy far more than such general standards as honesty, chastity, holiness, etc. are the habits that come from overt education and conscious training. "Playing the game," "being a good sport," a "straight-shooter"—these point to the real standards of the living generation. In overt education—in school, in scouting, in church—the vaguer standards inherited from the past are always reaffirmed, but they are reaffirmed in a concrete setting that discloses what about them is possible, what merely ideal. Techniques and technologies as presenting opportunities for, and furnishing expectation of, success spell out another type of persisting pressure for the regimentation of action into conduct. The silent influence of the way people act—in distinction from what they teach—as detected at home, at school, at play, in the movies, in the press, is perhaps the greatest of all, because indirect and largely unconscious. These standards, just because they are ingrained as habit, become second nature in their dominance.

The complex standardizing process, though difficult to exhibit in brief psychological analysis, may be seen at work in historic examples. Sparta was able in an astonishing degree to ride over the inhibitions of competing desires and tendencies and to weave the energies of all its citizens into a single pattern. The silent forces of unambiguous approbation and equally unambiguous shame tended to keep the youths proud where the standard setting group thought they ought to be proud, cowed when inclined to deviate from unequivocal expectation. It is the final test of social determination of action that men think first of honor and second of liberty. The Spartan was a Spartan first and a man afterwards. Spartan success may easily be attributed to the military regimen, but it should be noted also that the regimentation began so early as to displace family interference. Stern discipline, military uniform and salute and the presence of an enemy may do much against odds. And where such discipline does not meet the expectation of preferential treatment which the family circle begets it is finally effective. Nowhere better illustrated than in the military is the fact that a common life, even though initially felt as against the will, eventually

breeds common sentiments. Behavior precedes ideas and in the long run always conditions them. If the environment, either physical or social, sets barriers too difficult to override, then activity, adapting itself ad interim to what is allowed, later contents itself with the residual course and at last breeds feelings that reenforce the stream of action, by now habitual. These feelings accepted as appropriate constitute standards.

On the road to this acceptance of standards as the etiquette of desire sanctions stand like stern sentinels. A sanction must itself ordinarily be accepted as a means before it can be effective toward an end. Compulsion there is in social control, of course; but compulsion gets its influence from the antecedent acceptance of it by the majority of people concerned. That is, it is the show of compulsion rather than the fact which ordinarily influences conduct. Illustrative of this is the working of such a stern sanction as ostracism in ancient Greece: powerful men accepted without a hostile gesture the verdict of expatriation and went quietly away from all that was dear to them—staying until public opinion changed or until they could themselves overwhelmingly override the forces that led them to accept their fate. The notable thing about sanctions, whether theological or physical or legal, is that when the show of force declines they lose progressively their own influence. The role of the state historically has been to maintain the conditions of compulsion for the regulation of conduct at its extremes. Underassertion of energy, overassertion of energy, crisscross assertion of energy—of these the state takes cognizance, though it is an acknowledgement of the essentially active nature of men that the state seldom uses force to stimulate men to act. Coercion may be used to turn action from one channel to another or to stop it altogether; but that men will and do act is the most dependable of assumptions regarding the human nature which when canalized issues as conduct.

Perhaps the greatest metamorphosis inside the field set by this discussion is the subsidence of intent from the realm of conduct. The state finds it progressively impossible to enforce standards upon thinking; where this change is most notable is in religion. Men were once held responsible for what they thought as well as for what they did. The almost complete recession of this attitude does not mean that character no longer counts, but that where it counts is in conduct. As purely private, if it ever be so, it

may be enjoyed as a luxury. John Stuart Mill expressed well the influence here of the whole utilitarian movement in declaring that motive that does not change the intent and thus the ensuing consequences does not count in morality. The pragmatic movement, especially as represented by William James, furthered this tendency begun by deism and continued in utilitarianism by holding that only what makes a difference for conduct is proper ground for any distinction. This emphasis may be taken to mean, as by behaviorists, that intent and even consciousness as a whole is a function of doing, or it may be taken to mean that social control reaches the boundary of fruitfulness when it releases the springs of spontaneity that constitute the uniqueness of each individual.

T. V. SMITH

See: CUSTOM; TRADITION; CULTURE; ETIQUETTE; CONVENTIONS, SOCIAL; MORALS; ETHICS; CHARACTER; HONOR; SERVICE; CONFORMITY; COERCION; EDUCATION; BELIEF; PERSONALITY; BEHAVIORISM; INDIVIDUALISM; PRAGMATISM.

Consult: Dewey, J., *Human Nature and Conduct* (New York 1922); Mill, J. S., *Utilitarianism*, ed. by Ernest Rhys (London 1910); Radin, P., *Primitive Man As Philosopher* (New York 1927); James, W., *Principles of Psychology* (New York 1890); Watson, J. B., *Psychology, from the Standpoint of a Behaviorist* (3rd ed. Philadelphia 1929); Hobhouse, L. T., *Morals in Evolution* (4th ed. London 1923); Laski, H. J., *Grammar of Politics* (London 1925).

CONFÉDÉRATION GÉNÉRALE DU TRAVAIL, the General Federation of Labor, known by its initials as the C. G. T., has a position in France similar to that of the American Federation of Labor in the United States and of the Trade Union Congress in Great Britain.

Modern trade unions (*syndicats*) began to develop in France after the passage of the law of 1884 permitting trade union organization on a national as well as local basis. Within ten years there had come into existence about 2200 trade unions, including over 400,000 industrial workers. National trade unions had been formed by the typographical and the textile workers, by miners, railroad men and workers in several other industries. In fourteen cities there had been organized so-called *bourses du travail* (labor exchanges), which corresponded in a general way to the city central labor unions in the United States as these functioned prior to 1900 and which had been combined into a national federation. Since 1886 there had also been in operation a *Fédération Nationale des Syndicats*.

the conflict of laws should be, but thus far it has declined to exercise such power. As regards the choice of the ordinary rules of the conflict of laws the Supreme Court appears disposed to give to the state courts entire freedom except where it is necessary to check legislation which is deemed especially obnoxious.

Another source of complication in the United States arises from the coexistence of state and federal courts. Although a given factual situation has arisen in some other state or country, a federal court may decline to look to the law of such state or country and apply its own rules on the ground that the particular matter is one of general instead of local law. On this ground the federal courts have refused to enforce stipulations against negligence by carriers contained in bills of lading issued in foreign countries, although such stipulations were valid under the law of the foreign country.

Attention has been called to but a few of the problems presented by the subject of the conflict of laws. These problems will disappear as uniformity in the municipal law of the different states and countries is achieved. Some progress in the direction of such uniformity has been made in the United States in the field of commercial law, but relatively little in other fields. As between the nations of the world strenuous efforts have been made to get some degree of uniformity in matters most directly affecting foreign commerce, such as in the law of bills and notes, sales, carriers, shipping and the like, but the difficulties in the way are still very great. Other efforts have related to the unification of the rules of the conflict of laws in the different countries. Among the continental countries some progress has been achieved in this direction through the conventions at The Hague on private international law. As a result of the recent codification of the subject at the Pan-American Conference in Havana a similar development has taken place in Latin American countries. The Anglo-American point of view, however, is so different from that of other countries that England and the United States find it difficult to join in such attempts at unification. So far as the latter country is concerned, the restatement of the conflict of laws by the American Law Institute may constitute a unifying influence, but it is hardly to be expected that it will affect materially the law of other English speaking countries.

ERNEST G. LORENZEN

See: INTERNATIONAL LAW; JURISDICTION; ROMAN

LAW; CUSTOMARY LAW; COMMON LAW; SOVEREIGNTY; COMITY; FULL FAITH AND CREDIT CLAUSE; COURTS; DOMICILE; CONTRACT; FAMILY LAW; INHERITANCE; NATIONALITY; UNIFORM LEGISLATION.

Consult: For general history and bibliographical sources: Meili, Friedrich, *Das internationale Civil- und Handelsrecht* (Zurich 1902), tr. by A. K. Kuhn (New York 1905); Beale, Joseph H., *A Treatise on the Conflict of Laws*, vol. i- (Cambridge, Mass. 1916-). For France: Lainé, Armand, *Introduction au droit international privé*, 2 vols. (Paris 1888-92); Pillet, Antoine, *Principes de droit international privé* (Paris 1903). For Germany: Bar, Ludwig von, *Theorie und Praxis des internationalen Privatrechts*, 2 vols. (2nd ed. Hanover 1889), tr. by G. R. Gillespie (2nd ed. Edinburgh 1892); Zitelmann, Ernst, *Internationales Privatrecht*, 2 vols. (Leipsic 1897-1912); Frankenstein, Ernst, *Internationales Privatrecht*, vols. i-ii (Berlin 1926-29). For Italy: Fiore, Pasquale, *Diritto internazionale privato*, 4 vols. (4th ed. Turin 1901-09). For Spanish America: Bustamante y Sirvén, A. S. de, *Tratado de derecho internacional privado*, vol. i- (Havana 1896-). For England: Dicey, A. V., *A Digest of the Law of England with Reference to the Conflict of Laws* (4th ed. London 1927). For the United States: Story, J., *Commentaries on the Conflict of Laws* (8th ed. Boston 1883). For local law theory: Lorenzen, E. G., "Territoriality, Public Policy, and the Conflict of Laws" in *Yale Law Journal*, vol. xxxiii (1924) 736-51; Cook, W. W., "The Logical and Legal Basis of the Conflict of Laws" in *Yale Law Journal*, vol. xxxiii (1924) 457-88; Sloovere, F. J. de, "The Local Law Theory and Its Implications in the Conflict of Laws" in *Harvard Law Review*, vol. xli (1928) 421-52. For doctrine of *Renvoi*: Lorenzen, E. G., "The *Renvoi* Doctrine in the Conflict of Laws" in *Yale Law Journal*, vol. xxvii (1918) 509-34, with appended bibliography. For various other phases: Dodd, E. M., Jr., "The Power of the Supreme Court to Review State Decisions in the Conflict of Laws" in *Harvard Law Review*, vol. xxxix (1926) 533-62; Jitta, D. J., "The Development of Private International Law through Conventions" in *Yale Law Journal*, vol. xxix (1920) 497-508; Valery, J., "The World War and Its Effects on Future Private International Law" in *Harvard Law Review*, vol. xxxi (1918) 980-1010 and 1064-88.

CONFLICT, SOCIAL. Social conflict results from the conscious pursuit of exclusive values. In the widest sense of the word conflict is conscious competition, and competitors become self-conscious rivals, opponents or enemies. The individual members of society are always widening or narrowing the sum of their claims on society for life, liberty of movement, property and deference. For the most part the relative position of the individual in relation to the current values is controlled by influences of which he is unaware. But in some measure everyone believes that his personality can and should be protected from the encroachment of

others and that it can be aggrandized at the expense of others. Conflict may involve the defense of what one already has or the acquisition of what one has not; and acquisition may mean the taking away of that which pertains to another or the appropriation of that which another would like to have. The defensive, destructive and obstructive aspects of conflict become entangled with one another in every crisis.

Exclusive values may be pursued by means which vary from physical violence to persuasion, thus including the whole armory of instrumentalities for social control. Conflict among men differs from the struggle for survival among animals in the diversity of the means employed. Each animal species is bound by its structure to a small number of highly stereotyped means of coping with a conflict situation, but so plastic is the nature of man that rich variations are discoverable within the human species. The place of physical combat is usually taken by argument, admonition, ridicule, litigation and the manipulation of surrounding circumstances; and these are functions of the cultural setting in which conflicts occur. Although the instinctive nature of man is in principle non-social and in important particulars antisocial, man is capable of socializing his destructive impulses to a very high degree.

It may be considered a truism that social conflict is a mode of registering, and often a mode of consummating, social change. Conflict is acute where change is swift, and here the vested interests and sentiments of the old order stand out against eager pressure from the new. A crisis may "clear the air" and bring about a willingness to come to terms with the requirements of reality. Mobs, strikes, boycotts and wars have not infrequently led to a more permanent organization of interests, and social tension has often subsided after prolonged agitations and protracted litigations. After a "stand" the legionaries of the old may retire with honor from the field and leave the new in full command. Occasionally a crisis results in the obliteration of one or both contending parties.

That a particular conflict will produce a relatively abiding settlement is no foregone conclusion; it is often said that issues are never decided, they are only superseded. National cleavages push religious cleavages into the background, and class divisions threaten national unity. But behind the clash of armor and argument are the silent processes of social life, which redefine the value pyramid and eventually display themselves

in new frontiers of strife and controversy. Innovations in the technique of production and the resulting enrichment of the adventurer and impoverishment of the beneficiary of the older order fit up the stage and rehearse the characters for the next act in the social drama. Against the prominent practises and symbols of the present order accumulates a mass of repressed hostility, and from within the framework of society itself there springs the dialectic of its alteration. Certain realignments may suddenly appear, as when an instant and overwhelming threat to a common value looms in the immediate foreground and men combine against it where they have been unable previously to combine for anything else. The whole catalogue of contrasts between individuals furnishes possible lines of separation, but the zones of conflict at a given phase of culture are circumscribed by geographical position and by the incidence of social change within the institutional structure. Not only the parties but also the modes of conflict are prearranged by the conventions of the group.

The thinkers of the last century were so aware of the clash of nation, culture, party and industry, so impressed by the biological struggle for existence, so struck by the mechanical analogies drawn from the study of flying particles, that they were disposed to take the fact of conflict too earnestly. Usually their philosophies were used to support some militant program on the part of those who had grown impatient of sublimated forms of social settlement. Even the philosophy of the democratic state was strongly tintured by this ruling preoccupation with the fact of conflict.

In a certain sense the "philosophy of compromise" is in itself a curb on the tendency to resort to coercion rather than discussion; but from another point of view it is fatalistic and negativistic, for it seems to concede in advance that there is no truly inclusive set of social aims in relation to which local differences may be conciliated. A compromise is by its very nature a crazy quilt in which everyone can identify his patch; he can find consolation for his disappointment by reflecting that everyone else is disappointed too. In some quarters the philosophy of compromise has tended to pass over into a philosophy of integration. The solution of a conflict by integration is a redefinition of the interests involved; the parties cannot identify their "wins and losses." Such a conception is affirmative and challenging to those who hold

social power, for it dares suggest that perhaps no social conflict is so serious that creative intelligence may not economically resolve it. Men who are in the center of wars, feuds and elections usually develop a cynicism which springs from their own incapacity to exercise much control over the course of events. The philosophy of integration is a philosophy of hope, but its effective application depends upon its timely, that is to say upon its preventive, application.

One of the most pervasive patterns of thought conceives of conflict in personal terms. But there is a way of thinking which transcends social conflict and prepares the road for collaboration in the mobilization of effort against the non-human enemies of man. More men are killed by pathogenic bacteria than perish from bullets, yet the imagination of mankind has not yet been kindled against the invisible enemies of the species. It may be that the manipulation of collective opinion for the sake of raising the prestige of science will contribute toward the achievement of this sense of unity of man with man. It may be possible to dramatize the plight of man as a lonely adventurer adrift on a speck of dust in the unplumbed vastnesses of celestial space and thus to arouse a sense of the ludicrousness of internecine strife and place a premium upon sublimated forms of conflict.

If mankind succeeds in reducing fighting to a minimum on behalf of collective entities like states and classes, will personal rivalries increase? Historically liberty has often been sacrificed to authority in the presence of a violent common threat. Rivalries for personal distinction have been directed to more than personal ends, through the identification of the individual with the fate of a collective symbol. If conflict declines in its most peremptory collective forms, it is thinkable that the expenditure of human energy on long run ends might diminish. The fighting crisis provides a fairly definite standard for measuring the value of human effort. The measurement of economic efficiency, however, is at least as definite, although it has historically failed to inflame the imagination of the community. Wherein lies the superior claim of fighting to be considered sacrifice? Crises of fighting are intermittent; they are dramatic and they mean the gratification of very powerful primitive desires. The production of wealth is a continuing problem and it involves the relative subordination of impulse to the calculation of interest. It may be that in the American cult of

prosperity we have the evolution of a social objective which may eventually have much of the powerful sanction which clings to military action; although it may be that the dramatization of the struggle for prosperity will always fail to gratify human impulses, which, to find sublimation, will have to be diverted into vicarious orgies of popular art and sport.

HAROLD D. LASSWELL

See: SOCIAL PROCESS; COMPETITION; CLASS STRUGGLE; VIOLENCE; WAR; CHANGE, SOCIAL; COMPROMISE; DISCUSSION.

Consult: Simmel, Georg, *Soziologie* (3rd ed. Munich 1923) ch. iv; Ratzenhofer, Gustav, *Wesen und Zweck der Politik*, 3 vols. (Leipsic 1893); Gumpłowicz, Ludwig, *Der Rassenkampf* (2nd ed. Innsbruck 1909); Sorel, Georges, *Réflexions sur la violence*, *Études sur le Devenir Social*, no. iv (3rd ed. Paris 1912), tr. by T. E. Hulme (New York 1914); Marx, Karl, *Das Kapital*, 3 vols. (Hamburg 1890-94), several English translations; Davie, M. R., *The Evolution of War* (New Haven 1929); Treitschke, Heinrich von, *Politik*, ed. by Max Cornicelius, 2 vols. (Leipsic 1897-98), tr. by Blanche Dugdale and Torben de Bille (London 1916); Oppenheimer, Franz, *Der Staat* (Frankfort 1907), tr. by J. M. Gitterman (Indianapolis 1914); Catlin, G. E. G., *A Study of the Principles of Politics* (London 1930) ch. v; Mosca, Gaetano, *Elementi di scienza politica* (2nd ed. Turin 1923); Adams, Brooks, *The Theory of Social Revolutions* (New York 1913); Pareto, Vilfredo, *Trattato di sociologia generale*, 3 vols. (2nd ed. Florence 1923); Follett, M. P., *The New State* (New York 1918), and *Creative Experience* (New York 1924); Freud, Sigmund, *Das Unbehagen in der Kultur* (Vienna 1930), tr. by Joan Riviere as *Civilization and Its Discontents* (London 1930).

CONFORMITY, according to its dictionary definitions, implies an initial difference which is molded into similarity or sameness. It presupposes a model or standard serving as a mold to which the conformist conforms. His attitude is one of considered and voluntary submission, adaptation and compliance; his purpose is to bring about a harmony of himself with the model. It is assumed, first, that the conformist is plastic and active, the model rigid, passive, inert; and, second, that the conformist is always an individual or a minority, the model always a majority, community or group, with its folkways, fashions, conventions, institutions and mores.

These assumptions are not altogether true. Occasions arise, especially under conditions of crisis and change, such as great natural catastrophes, important inventions like that of automatic machinery, or political revolutions, when the standard or model is an individual or a minority (the Russian Communist party, the

profit consumers' research organization has recently been formed to advise them concerning the relative merits of retail goods. Through the spread of such institutions or of consumers' cooperation or possibly of the use of scientific buying technique by large commercial retailers the ultimate consumer may gain increased protection.

GEORGE SOULE

See: INDUSTRIALISM; BUSINESS; BUSINESS ETHICS; FOOD AND DRUG REGULATION; ADULTERATION; UNFAIR COMPETITION; ADVERTISING; CAVEAT EMPTOR; GRADING; STANDARDIZATION; WEIGHTS AND MEASURES; PRICE REGULATION; GOVERNMENT REGULATION OF INDUSTRY; BOYCOTT; CONSUMERS' LEAGUES; CONSUMERS' COOPERATION; STANDARDS OF LIVING.

Consult: Levett, A. E., *The Consumer in History* (London 1929); Chase, Stuart, and Schlink, F. J., *Your Money's Worth* (New York 1927); Wilbrandt, Robert, "Kapitalismus und Konsumenten" in *Grundriss der Sozialökonomik*, vols. i-ix (Tübingen 1914-29) vol. ix, pt. ii, p. 411-56; Clark, J. M., *Social Control of Business* (Chicago 1926) pt. iii; "Standardization and the Consumer" in *American Academy of Political and Social Science, Annals*, vol. cxxxvii (1928) pt. iv; Radin, Max, *The Lawful Pursuit of Gain* (Boston 1931); Wiley, H. W., *The History of a Crime against the Food Law* (Washington 1929).

CONSUMERS' COOPERATION. Consumers' cooperatives are to be distinguished from consumers' leagues or other public or semi-public organizations which seek to protect consumers' rights in the course of their dealings with producers or purveyors of consumption goods. Consumers' cooperatives are actual economic enterprises in the form of stores or shops, set up by associations of consumers to distribute fundamental consumption goods, usually staple food items, but also at times clothing, furniture and the like. In the process of expansion a group of stores may set up a wholesale distributive and may even establish its own factories and farms for the production of these goods. Or consumers' cooperatives may furnish other consumption needs, such as housing, insurance against risk, provision of gas, light, transportation. In order to set up these enterprises it is necessary to acquire capital and to found a joint stock society.

These economic enterprises differ, however, from ordinary joint stock companies not only in their aims but in their actual economic and legal characteristics. In the first place, they are not restricted as to the number of members and the number of shares but are open to anyone who wishes to join, and the last comers, moreover,

are on an equal footing with the first. From this initial rule necessarily follows the corollary that the value of the shares at no time can be higher than their price at issuance and that speculation on rising values is therefore impossible. This constitution, practically impossible in an association for production purposes because of limitations both of capital and of demand, is advantageous in an association of consumers in which each new arrival brings with him his consumption capacity.

In the second place, capital as such does not play the same role or have the same rights in government or profits as in ordinary joint stock enterprises. In the consumers' cooperatives every member has an equal vote in the assemblies regardless of the number of shares he may possess. The profits of the enterprise are divided pro rata for purchases and not for shares, so that it might be said that profits are returned to those who originally paid them. In fact, in describing the return French cooperative enterprises prefer the term *ristourne*, or *trop-perçu*, to the English cooperative term dividend with its profit making connotations. Thus it might well be asserted that these returns to purchasers are not a form of profit but rather the negation of profit. Cooperatives have protested against a tax on alleged profits which they claim are non-existent because the surplus redistributed to members was based on overpayment arising from the practise of marking goods at current competitive prices.

As a result of these rules capital, whether obtained in the form of loans or of shares, is restricted to a mere return based on the cost of obtaining it or as limited remuneration for its share in the services rendered and is no longer the dominant factor in the government of the enterprise or in the distribution of profits. Within this voluntary association therefore capital and profit in their ordinary forms are virtually abolished by pacific legitimate means, without any imposition of exterior restraint or any change in the basis of the social and economic order as to property, inheritance, interest, salary or even competition. There is nothing in the nature of the association to prevent its spread by the formation of similar voluntary associations and by federation throughout the nation or even on an international scale.

These economic and legal limitations on the role of capital and profits are supplemented by certain further ethical limitations self-imposed by the majority of consumers' societies. These

include the provision that not all profits are to be returned to the individual members but that a portion is to be devoted to enterprises for collective welfare, such as the propagation of cooperative ideals and the provision of educational and recreational facilities for workers.

The special characteristics of consumers' cooperative enterprises require special legislation, for they do not easily conform to common law concepts. Thus there are special laws on consumers' cooperatives in most countries today, including countries such as Mexico and Argentina where the movement is still in its infancy.

Consumers' cooperatives, which now include over 40,000,000 members in about 60,000 societies in thirty or more countries, began in 1844 with the association of twenty-eight English weavers in Rochdale near Manchester. As early as 1827, however, consumers' societies had existed and had even developed sufficient strength to establish a wholesale; one or two societies still in existence antedate the experiment of the "Equitable Pioneers of Rochdale." Nor did the theory of cooperation arise with the Rochdale weavers. They were in fact somewhat under the influence of Robert Owen, whose use of the term cooperation made it synonymous with communism but who is often credited with the paternity of the movement because he coined the term and said: "You must become your own merchants and your own manufacturers . . . to be able to supply yourselves with goods of the best quality and at the lowest price." Both in Owen's plans and experiments for communistic settlements and in those of the French socialist Fourier in his *Traité de l'association domestique agricole* (2 vols., Paris 1822) social transformation into these forms of society was to come about through outside intervention of philanthropists. But the Rochdale Pioneers began to express this social transformation through the voluntary and independent association of groups from the very midst of the masses and thereby gave it its voluntaristic and democratic form. It was one of their members, Charles Howarth, who devised the method of disposing of surpluses which is described above, and which proved to be the indispensable practical as well as ideological tool for the accumulation of membership, capital and patronage. Prior to that time profits had been distributed to shareholders (a practise which encouraged the limitation of membership), equally divided among all members without regard to their patronage of the enterprise or else buried in

an inalienable reserve fund. The essential characteristics of all consumers' cooperatives, including the sale of goods at current prices and for cash and the device of voting by membership instead of by shares, were also inaugurated by the Rochdale weavers. Although in several countries individual consumers' enterprises mainly under the influence of Fourierist disciples had been experimented with before the Rochdale enterprise, the history of consumers' cooperation throughout Europe is mainly one of the founding of societies patterned on the Rochdale practises. It is true that the Rochdale Pioneers in their original statement of aims included the emancipation of the workers from their employers through self-employment and even the founding of cooperative communities. But they themselves never carried these principles into practise, and in England it remained for a group under the moral leadership of the early Christian Socialists to attempt the fulfilment of this aim.

The development of consumers' cooperation has proceeded instead along the assumption, not clearly articulated at the outset, that production was not an end in itself but must be a response to consumption needs of society. This is illustrated in the development of consumers' societies within a country or community. Small consumers' societies commonly begin with, and often limit themselves to, the provision of simple uniform daily needs which requires neither large capital nor special technical equipment. Groceries and bakeries are usually the first types of store to be established. Somewhat later, as in the case of large English cooperatives, they extend their scope to include haberdashery, clothing, furniture and the like. Usually housing or insurance societies take the form of separate organizations. When the societies have reached the second state of development, that of a regional union among themselves, they set up a wholesale society. In the course of time these wholesales have themselves entered upon the field of production, both because the consumers' cooperatives wish to procure the articles as close to the source of production as possible in order to reduce costs and because they have found themselves at times in conflict with capitalistic production—as when a large soap concern in England objected to the dividend as a price cutting scheme and when, on the other hand, the cooperative movement joined with other socially minded organizations in a protest against the treatment of labor on native planta-

tions. Thus the wholesale societies of Manchester, Glasgow, Hamburg and Stockholm and the Centrosyus of Moscow have established large industrial plants which at times have been able to defeat capitalist trusts.

With the entry of the consumers' cooperative into the fields of production and distribution there arose the question of its relations to the labor employed by society. In England and Germany, for instance, while a large proportion of the membership of the consumers' societies is drawn from the laboring classes, the workers employed by the cooperatives regard them as employers. These workers have of course the opportunity, of which they usually avail themselves, of joining constituent societies and thereby benefiting as consumers from the operations of the cooperatives. In fact, such students of the cooperative movement as Beatrice Webb see in the consumers' cooperative movement a new social organization which would supplement the trade union movement by organizing the workers as consumers. This has generally been the attitude of the trade union leaders and the basis of their support in most countries of the cooperative movement. On the other hand, the cooperative societies have in most cases been willing to recognize and deal with their workers as an organized group and in some cases have been of great aid to the trade union movement. In Germany standard agreements with the unions have been worked out with reciprocal obligations on both sides. This has checked the tendency of the specific trade unions involved to ask for standards above those which they set in their agreements with ordinary commercial and industrial enterprises. A highly praised expedient for dealing with this problem is that employed by the Scottish wholesale of making workers eligible to membership not only in the constituent societies but in the national federation itself, in which they are granted voting power in proportion to the total membership. A suggestion has been made of permitting representation of the employees either upon the board of management or upon the advisory board of the wholesale society.

Moreover, the English societies in particular found themselves in competition not only with capitalistic trusts but with workers' producing cooperatives, which in many cases they finally absorbed. When the field of production is agriculture, new conflicts arise with agricultural cooperators, who are a far more powerful group than the workers' producing cooperatives ever

were. In Scandinavian countries and elsewhere, where on the whole agriculture and industry are equally important, central clearing houses functioning between the various types of organizations have been set up with varying degrees of success. The wholesale cooperative of so industrialized a country as England has entered into cooperative agreements with the central clearing houses of other countries, but it has come into conflict with the agricultural cooperative movement within the empire, especially in Ireland. The problem is by no means resolved and is a matter of great concern for the cooperative movement.

Conflict with other types of cooperatives either in practise or in ideology arises also in the second state of development of the cooperatives, when individual scattered local societies form into a national organization. The tendency at first is to unite all types of cooperatives in one federation, but inevitably conflict has arisen which has led to the establishment of separate types of nationals. Similar conflict arose in the third stage of development, when national federations formed in 1895 the International Cooperative Alliance. Although it is nominally an alliance of all types of cooperation, conflicts have resulted in the withdrawal of many agricultural and credit societies and in the refusal to admit that type of profit sharing enterprise known as copartnerships, until now more than three fifths of its membership are affiliated with consumers' cooperatives.

These three stages of development—the formation of local consumers' societies (which in most countries of Europe began about 1865), then the formation of national associations about a decade later and finally the affiliation with an international organization—have not been undergone by the cooperative movement in all countries, for development has not been equal in all countries. In France and to some extent in Switzerland large numbers of individual societies are not affiliated with the national federation, and the consumers' society membership of the International Cooperative Alliance includes only 33,000,000 out of 40,000,000 in all countries. Cooperation is far more active in the north than in the south. Thus in the north are the three great countries of cooperation—Russia, Great Britain, Germany—and the two smaller countries which are from the point of view of intensity and quality of the movement of great significance—Denmark and Finland. In Belgium, Switzerland, Czecho-

slovakia, Austria, Hungary and Poland the movement also flourishes. But in Italy, Spain, Rumania, Portugal and even in the southern half of France itself consumers' cooperation is poorly developed. In some of these countries, however, agricultural and credit cooperative movements are more flourishing.

More specifically, the development of cooperative movements and of their particular types is bound up with the stage of development of general economic and social forces. In countries but poorly developed except in agriculture and there suffering from certain defects of primitive organization it is only natural to find credit and agricultural and not consumers' societies. Moreover, consumer's cooperatives flourish best in societies of large membership—in London they reach numbers of 100,000 or even 300,000—whereas other cooperative forms can be founded among small groups. Since the interest of the consumer is far less apparent than that of the producer and since he is usually passive in his role, the consumer's cooperative is more difficult to develop.

The success of the consumers' cooperatives within a country can be judged by membership figures, by the proportion of the total population which this membership includes, by the total extent of its sales, by the average sales per member and by the proportion of the member's income which is spent in his cooperative store.

Russia with a membership of over 15,000,000 in consumers' cooperatives accounts for almost half of the total consumers' membership of the International Cooperative Alliance; Great Britain follows with a membership of 5,600,000, almost a sixth of the total membership; Germany and France follow with about 4,000,000 and 2,500,000 respectively. But the movement in some of the smaller countries, such as Switzerland and Hungary, represents as high a proportion of the total population as in Great Britain and a great deal higher than in France. There is a similar variation in the proportionate purchases per member. In Great Britain, Hungary, Russia and Switzerland, for instance, the membership of consumers' cooperatives represents one tenth of the total population, and since this usually includes only one member of a household of four or five persons it is apt actually to represent almost half of the population. In the community of Basel practically the entire population belongs to cooperatives.

Another test of the strength of the movement is in the degree to which it has pervaded the lives

of its membership. This is shown not only in the extent of membership or of sales but in the development of education along cooperative lines, in the development of the cooperative press and of educational courses within the movement itself and in the introduction of courses on cooperation in the schools and universities of the country; in the establishment of "people's houses" as in Belgium, in the extent to which the women and children have been drawn into the movement and in the democratic participation of its entire membership. It is true of course that, as the movement gains in numbers and geographic extent, the last named activity becomes a problem. This is closely linked, however, with the development of an able leadership both for the technical administration of the business of the cooperatives and for its educational work.

Broadly speaking, the consumers' cooperative movement has certain fundamental rules, evolved by the weavers of Rochdale, which are everywhere observed. They are: absolute equality in elections—one man, one vote; the return of profits to the buyer pro rata for purchases after the deduction of a specified levy for collective works of education, recreation and solidarity; and sale at current price for cash.

In addition to these basic principles there have appeared attempts to give the movement a broad theoretical and ideological basis. Theorists have not been in complete agreement—a natural situation when the origins of the separate movements and the variations in nationality, social background, political affiliation and even economic grouping of the membership are considered. Internationally the movement is politically neutral. In certain countries and communities, however, it is socialistic or socialistically inclined. Thus the Belgian cooperative movement was begun by socialists and although not restricted to them in membership still maintains its socialist character; in Russia the movement is of course communistic. In certain countries separate socialist federations have been formed, and almost everywhere there exist socialist minorities.

Diversity of opinion within the movement itself in the determination as to what attitude it should take toward other forms of cooperative endeavor, toward socialism, trade unionism, profit, the capitalistic order and the state has accelerated the formulation of a theory. In England the work of Beatrice Potter (Mrs. Sidney Webb) in her *The Cooperative Movement*

(London 1891) was epoch making. In Germany, under fire from the socialists on the one hand and the marketing and credit cooperatives on the other, the leaders of the consumers' societies were slow in evolving an ideology. Earlier than any of these attempts, however, was that begun in 1886 by the group which came to be known as L'École de Nîmes and which has most emphatically stated the doctrine of cooperation.

This group sees economic government passing from the hands of the producers and capitalists to the hands of the consumers, whose ranks include all classes. This placing of the consumer in the first rank was a new idea, for previously he had been accorded the most negligible of roles in theory and practise. The English co-operatives, for instance, even today carry not the name of consumers' societies but rather that of distributive societies. This point of view means to consumers' cooperatives the loss of a specific working class character. It does not, however, imply any desire to ignore the essential working class origins of the movement in most countries or even its general socialistic and radical leanings, especially as exemplified by the Belgian socialist cooperatives and political and economic alliances between the English cooperatives, the trade unions and the Labour party. It refuses to accept the Marxist statement that labor is the sole creator of wealth and declares that it is consumption, or need, which creates value. With equal force cooperation refuses to capital the right to control production and to draw profit, and it has thus encountered the opposition of the middlemen and manufacturing capitalists. Where the state is markedly capitalistic it too has reflected the opposition to consumers' cooperation.

The socialists on their side have had a rather varied and complicated attitude toward cooperation. At the beginning of the cooperative movement in the middle of the last century they were very sympathetic to the idea, especially to producers' cooperation, since it was a specific proposal of such socialists as Owen, Fourier, Louis Blanc, Lassalle, Mazzini. The failure of this type of cooperation and the formulation of Marxism caused a rejection of all cooperation on the grounds that it was a purely reformist and bourgeois program. Nevertheless, in actual practise such examples as the reciprocal role of cooperation and socialism in Belgium, the actual assistance rendered by consumers' co-operatives in many countries during periods of industrial struggle and a recognition of their

general importance have led to a revision of the socialists' attitude. They recognize cooperation, however, only as an annex of socialism for the purpose of furnishing them with resources at times of strikes and political elections. Thus the cooperative, the trade union and the party are all three yoked to the socialist chariot and must be proletarian in character. If the cooperative remains neutral it is more of a hindrance than a help, for then it will be more serviceable to the petty bourgeoisie than to the workers or might even transform the proletarians into small capitalists greedy for bonuses and completely uninterested in all revolutionary action. Nor do the socialists accept the thesis of L'École de Nîmes that the control of the economic world should belong to the consumers; they naturally claim it for labor.

The claim of the French school has also been criticized by economists, especially those of the "liberal" school. Part of their criticism of cooperation centers about the relation of the movement to the state. The "liberal" economists of course profess a strong antipathy to the intervention of the state in the economic order, and thus they object to the existence in some countries of favorable legislation, subventions, exemptions from taxes and other privileges which are accorded to cooperative societies. It is necessary to point out that on the whole these privileges have been more frequently accorded to agricultural societies, credit or marketing or producing societies, than to consumers' organizations. In some countries the consumers' movement has been initiated with state aid, although in others municipalities and other public bodies have expressed hostility by forbidding their employees to be members of consumers' cooperatives. The cooperative movement has carried on an effort, sometimes against great odds, for legislation recognizing its peculiar status; and its sponsors cannot be classed with those advocates of voluntary mutual aid who will not recognize any right of legislation on the part of the state. In certain countries, as in Russia, and in such communities as the city of Basel where practically the entire population belongs to the cooperatives, the state can with justice be considered merely as the political expression of the economic unity. On the part of the state itself there has been a tendency to enter the field of consumers' cooperation, which is best illustrated perhaps by the cooperative public boards developed in Belgium and to some extent in Italy and Austria. These consist of cooperative

organizations set up by national, provincial or municipal government bodies for the purpose of providing gas, light, water, transportation, credit and housing for these communities. The dividends of these operations are divided according to consumption use. They are an example not of "stateizing" the cooperatives but of placing certain functions of public administration on a cooperative basis. In this identification, however, there is no retreat from the cooperative ideal of opposition to constraint. It was the element of constraint which led the International Cooperative Alliance between 1917 and 1921 to refuse to admit the Russian cooperatives because of their obligatory character, and it is for the same reason that the alliance still refuses to accept the Fascist cooperatives. The relation of the cooperative movement to the state during the period of the World War was of a similar character. In every country the cooperative movement rendered so great a service in the supply of food and other necessities to the population as to merit governmental approval. The International Cooperative Alliance, however, at all times held fast to its ideal of peace between the nations as embodied in its endorsement of such pacifist measures as disarmament, arbitration, commercial union and the removal of tariff barriers; and during the war it was one of the few international bodies which maintained relations between warring countries.

Within the field of economic endeavor itself the criticism of the "liberal" economists has centered on the claim that consumers' cooperation introduces a new element into economic theory and practise. A few of their number have chosen to see in the attempt of the cooperatives to formulate standards as to a "just price" and a "just measure" interference with the salutary effects of competition as it operates in supply and demand under a regime of self-interest. Others, however, look upon the fact that consumers' cooperatives base their prices on current "fair" prices, as established by ordinary competition, as proof that they too are governed by supply and demand and that the dividends, so called, are in reality a form of profit.

On the whole, however, the economists have not condemned cooperation, since in the last analysis it is a form of free association. They are willing to admit that it is of considerable service: to the consumer in serving as a check on the extortion of merchants and in reestablishing the desired effect of competition, which so far as the consumer is concerned is threatened today by

the coalition of producers; and to the worker in permitting him to utilize most advantageously the purchasing power of his wages and even by the redistribution of bonuses to realize savings which may permit him to acquire property.

This limited concept of cooperation, particularly as formulated in the second half of the last century by Paul Leroy-Beaulieu, Léon Say and M. Pantaleoni and reaffirmed more recently by Robert Liefmann in his article "Monopolies and the Interests of the Consumers" (in *Review of International Cooperation*, vol. xxii, 1929, p. 201-10), has been accepted by some groups of co-operators and is held in high repute by the leaders of Fascist cooperation. The French school realizes that this program in itself allows a vast field of action, but it reaffirms its belief in the capacity of the consumers' cooperative to go beyond these limits. In the economists' criticism is implied a denial of the assumption that an economic order based on a recognition of the needs of the consumer can replace one in which production operates through the motive of individual self-interest expressed in the form of profits. L'École de Nîmes does not postulate its assumption on the abolition of personal interest or the hedonistic principle, but it insists that mutual help is more efficient than self-help and points to the existence of the widespread consumers' movement as proof of the fact that enterprises can live and prosper without the profit motive as it exists in commercial enterprises. This is all the more remarkable because even by definition consumers' cooperation, in contrast to producers' organizations, is an association of non-professionals. Nevertheless, they have developed technical and administrative ability of a high order, and the questions of sharing profits or even of paying high salaries to management, although they have occasionally come up for discussion, have never had to receive serious consideration. As Alfred Marshall pointed out in a presidential address to the Cooperative Congress in 1889, this is probably because cooperation is "at once a strong and calm and wise business, and a strong and fervent and proselytizing faith." It is, in other words, an economic enterprise not wholly in the service of Mammon.

CHARLES GIDE

See: COOPERATION; COOPERATIVE PUBLIC BOARDS; CONSUMER PROTECTION; HOUSING; FOOD INDUSTRIES; RETAIL TRADE; MIDDLEMAN; COST OF LIVING; PRICE REGULATION.

Consult: Webb, Sidney and Beatrice, *The Consumers'*

prises of their own. The practise seems to have begun with Italian labor on railroad construction and other unskilled work; among the Syrians it took the form of the exploitation of peddlers under direct control of the padrones; and still later it spread to the races from the Balkan peninsula and to Mexicans in the south-west. The system was peculiarly likely to lead to personal oppression through many forms of exploitation due to the control over the immigrant by the padrone, as, for instance, when the padrone also acted as boarding house keeper and banker. It reached perhaps its worst point in the widespread employment of young Greek boot-blacks, under contracts often secured by mortgages on the family's land in the old country, in conditions of virtual slavery. In each case, however, the padrone system has tended to decline as the race becomes more firmly established in America, and together with other forms of contract labor it has become much less important with the reduction in the volume of immigration.

Under the present quota restrictions contract labor has ceased to be an acute issue, and it is now possible to see that the agitation against it was merely an early form of the general movement toward restriction rather than a movement raising major questions of its own. The chief importance of the system both to the employers who made use of it and to the unions that fought it was its effect in increasing the migration of low standard workers. The real menace of their competition, from the labor point of view, lay not in the fact that they came to a particular employer but in the fact that they came to the country at all. The contract, to be sure, often brought them directly to the scene of a strike; but their effect in lowering wages could hardly have been less had they been dumped upon the American labor market without knowing where to go. Nor would employers have taken the trouble and expense of importation had equally large supplies of tractable labor been brought to the country in other ways. The issue, then, appears to lose the unique importance sometimes attributed to it. As long as workers are to be admitted in large numbers into countries of very different standards it will no doubt be necessary to restrain employers and others from taking undue advantage of their ignorance. This may be accomplished as well by the Australian supervision of contracts as by the American attempt to prohibit them altogether, and perhaps even more effectively by placing immigrants under

the protection of government employment exchanges. In any case regulation of contract labor strikes only at the terms under which workers of lower standards are to be introduced; the more substantial questions are those of the rate and amount of importation.

CARTER GOODRICH

See: LABOR; FORCED LABOR; INDENTURE; MIGRATORY LABOR; LABOR CONTRACT; IMMIGRATION; DEPORTATION AND EXPULSION OF ALIENS; ETHNIC COMMUNITIES.

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CONTRACTS, PUBLIC. *See* PUBLIC CONTRACTS.

CONTRIBUTIONS, MILITARY. *See* REQUISITIONS, MILITARY.

CONTROL, SOCIAL. In its wider sense the term social control describes any influence exerted by society upon the individual. In its narrower sense, as currently used by certain economists, it has come to mean the consciously planned guidance of economic processes. The two types of control are found in varying combinations in all our social activities, and since the one term is used for both, they are easily and frequently confused. But a clear distinction must be made between those situations in which control by a group is unconscious and involuntary and those in which a group explicitly uses and directs individuals toward the realization of its own purposes. Although custom and convention, for instance, are powerful in conditioning the thought and conduct of man, society

does not exercise through them the same kind of control as it does through education or the movement toward the abolition of war. Customs are, however, continually being changed by the introduction of purposive activity on the part of some group. Indeed, as communities become more civilized, there is an attempt to take many of the unconscious, informal controls under the domination of intelligence and purpose—to make them serve conscious, formulated ends.

The American sociologists first gave currency to the term social control, and earliest among them E. A. Ross by the publication of his book *Social Control* (New York 1901). Their work has been devoted largely to the study of social control in its wider sense, to exploring the forces by which the group molds and shapes the individual—forces such as custom, belief, public opinion, tabu and ceremony. Cooley contributed much to this analysis by his vivid studies of the social conditioning of the individual, and a score of sociologists here and abroad have helped to elaborate the description of the origin, nature and extent of the stimuli and restraints under which the individual lives. Anthropology too has been of great importance in building up an objective technique for studying the forms of social control. The detachment with which one views primitive people has brought the essential institutional relationships and forces into clearer perspective.

In its narrower sense, that is, as active intelligent guidance of social processes, the idea of social control is thoroughly characteristic of the twentieth century. Other periods have had the notion of "controls" and exercised them effectively, but none has had so clearly the concept of "control." This is due on its practical side to the unparalleled achievements in the control of nature which have continually appeared, whether in the form of new mechanical devices or the discovery of unsuspected natural resources. That the waste product of yesterday becomes the valued resource of tomorrow is almost the typical drama of the twentieth century. On its intellectual side the interest in control may be traced in large part to a reaction against the schools of Spencer and the economic determinists who thought of evolution as advancing more or less automatically, regardless of man's interference. Influential in this reaction were the writings of Lester F. Ward, who labored long and effectively to make clear the role of collective intelligence in our social life. Among contemporary writers L. T. Hobhouse in England

has been especially concerned to show how social evolution has come more and more to rest upon conscious control by the human mind. In America the institutional school of economics, whose outstanding figures are Thorstein Veblen, Wesley C. Mitchell and Walton H. Hamilton, has made important use of the concept of social control. Indeed, it is perhaps their central organizing principle. The emphasis of the institutionalists is that economic arrangements are man made and susceptible of almost limitless variation. While for most economists the idea of control is like a mechanical bit of apparatus, for the institutionalists it is more of the nature of the guiding formula itself.

It is the essence of the historic process that controls are constantly losing their validity and giving way to new ones. Both the nature and the agencies of control shift from age to age with the structure and functioning of society. Mediaeval society, for instance, affords illustration of controls in striking contrast to those of our own time. In the relatively static organization of feudalism custom and authority constituted powerful controls. Custom regulated the dues and services of the villeins as well as the rights and obligations of the lord of the twelfth century manor; it dictated the method of land cultivation; it prescribed the daily routine of work and recreation; it was an important factor in determining the relation of buyers and sellers in the towns. To the modern mind, however, perhaps the most interesting controls were the moral and religious restraints upon economic life which issued from the church relating chiefly to the just price and the prohibition of interest. These controls were enforced through the ecclesiastical courts as well as in the confessional and from the pulpit; they appear as part of the moral code in the ordinances of town and guild as evidenced, for instance, by the famous rules against "regrating, forestalling, and engrossing." Another great control of this period lay in the simple fact that personal relations were dominant in all the affairs of life. The face to face responsibility of master and laborer, of producer and consumer, constituted a type of control possible only in a world of small, self-sufficient units.

In the break up of localism that followed the widening of commercial life and the rise of a money economy there was a confusion of controls typical of every transition period. Out of this confusion there gradually emerged a system of control administered by a central

government, whose aim was a narrow nationalism dominated by an obsession in favor of a monetary supremacy. Through bounties, commercial treaties, colonial exploitation, high duties on imports and a vigorous policy of taxation the state built up its balance of trade. In pursuance of mercantilistic theory foreign trade, shipping and manufactures were encouraged, while agriculture and domestic trade languished. Everywhere the hand of the government was visible and its weight heavy.

The somewhat distorted controls of mercantilism led to a revolt toward the system now called economic individualism, or *laissez faire*. Men caught the vision of a society in which external controls should be replaced by checks and balances within the system itself. If men could only work when and where they pleased, develop any trades from which profit could be won and leave the control of quality to the consumer—free from guild and government regulation—both individual and national welfare would be served. The ultimate control of the system was individual self-interest seeking pecuniary gain and regulated by “the invisible hand” of competition, which could be relied upon to direct labor and capital into the most fruitful channels, apportion the materials of production, stimulate technical processes and finally distribute the products by “the magic of the price mechanism.” The thought of this period was greatly influenced by the physical sciences, and the controls of the economic order were regarded as analogous to those of physics. Debates ran in terms of trade and industry finding their own level, of wages and commodities tending toward a “natural” price, of the “law” of supply and demand. Man made controls such as legislators or reformers could devise were considered artificial and therefore vicious. Free enterprise itself was deemed a form of control more sure and more efficient than any man could achieve.

This cluster of presuppositions called economic individualism found acceptance as a theory of social welfare during the great exploitative period of economic life in the nineteenth century, when the stores of natural wealth and the miraculously developing machine technique seemed to promise all things to all men. In this period of wasteful opulence planned guidance of economic processes seemed superfluous. There arose, it is true, a number of reform movements, some broadly humanitarian, others Christian or aesthetic in origin, condemning the inefficiency, injustice or ugliness of the

system. But the nineteenth century in general lived with the conviction that progress was inevitable, that it was inherent in nature and in man. The unprecedented accumulation of wealth was unhesitatingly read as an increase in the general welfare—an interpretation which found happy confirmation in current religious beliefs. In this expanding milieu individual self-reliance and initiative had more than a fair chance to win their way and became therefore the great virtues of the economic system. This was particularly true in America with its wealth of natural resources and wide distribution of industrial opportunity. Until the virtual disappearance of the frontier neither the fact nor the philosophy of conscious social control could make much headway.

During the past few decades the interest in social control has been steadily gaining ground. The forces at work in this development are discernible at many different levels of our complicated corporate life. Largely as a result of the technological and economic changes of the past decades there has been a breakdown of individualistic assumptions in almost every field of thought, particularly in ethics, psychology, law, education and religion. The transformation is due primarily to a deeper and more subtle understanding of the interrelation of men and institutions. It is now realized that the individual is in great part what his town, his family, his recreation, his church or his club makes him. Interest therefore has tended to focus more and more on the control of determining social conditions. It is now an intelligible social question to ask “What shall be done?” Undoubtedly the Russian experience has contributed enormously in making vivid the possibility of a deliberate change in any country in both the instruments and the aim of control.

There exists today a vast multiplicity and confusing variety in the instruments of control. The government is in a sense the most obvious and clearly defined of these instruments, exercising wide powers through the general enforcement of law and order and the maintenance of many standards in the field of industrial and social arrangements. With the increasing complexity of social organization, particularly in urban development, the need for statutory regulations has increased. But regulation by law has for the average individual less immediacy and significance than a host of the more informal controls which surround him, such, for instance, as the agencies of information and communication—

the newspaper, the magazine, the radio and the movie. These pervasive influences are largely responsible for the building up of the complex thing called public opinion. They mold men's minds and fashion their tastes in everything, from the kind of words they use to the moral attitudes they adopt and the things they want to buy. It is through these agencies too, as well as other agencies of its own making, that the economic system creates the wants which it is prepared to satisfy. By advertising and a host of allied arts it exercises a continual selective pressure upon society, building up needs for specific goods and services. In the subtle hierarchy of twentieth century controls none is more persistent than this fashioning of wants and desires.

The family too must be accounted an important control, transmitting language, beliefs, ideas, tastes and standards. In spite of loosening bonds family influences are determinative for a large area of life. The family is the focus for getting and spending and for the bequeathing of property; in its relation to the industrial system it is largely responsible for the quantity and quality of the labor supply. Yet the incidence of family control is to a great extent accidental. It comes under the guidance of no generally accepted planning. This is also true of the agencies of communication—they echo a million different voices. Among them is conflict; their relation to each other is chaotic. How these controls are in their turn controlled and how they should be controlled, by what agencies and to what end, constitute a continual challenge to society.

This same challenge applies also to the educational system in school and college. Education is perhaps the most useful tool of social control but it works for militarists and class conscious snobs as well as for humanitarians and men of vision. In this as in other social institutions the critical problem is to keep it free from special interests and give it wise direction. Religion too has always exercised powerful control although with the waning power of the creeds it has lost much of its importance. Preachers today are coming to have only such authority as is possessed by writers and educators. They no longer bring a special kind of salvation nor can they dictate specific rules of conduct, because they can neither threaten penalties nor promise sure rewards.

The multiplicity of controls in modern society is perhaps most clearly illustrated in our economic life, where no consistent pattern or pro-

cedure is discernible. Most of our economic activities are still carried on by business organizations in accordance with the doctrine of economic individualism. Yet it need hardly be pointed out how far reaching are the modifications of free enterprise—through the network of legal relations and institutions on which the whole system rests, through state interference, through the transfer of important industries from the "automatic" control of the competitive system to the deliberate control by administrative commissions. There are too the controls exercised by trade unions, chambers of commerce, Rotary clubs and—increasingly important—by trade associations which gather and distribute data, conduct lobbies, engage in co-operative advertising and frame and promulgate codes of business ethics and standards of practice. Control through formulated codes, which played so large a part in guild activity and which has always been accepted in the professions, is coming to have more validity in business practice today, as business management becomes more of a science and is taught as such. Another type of control arises from the development of a better technique in the measuring art. As statistical information becomes more accurate, relevant and available, a new basis of control is established over a wide area of social life. Finally, business, like every activity, is carried on in a complicated social setting where habits, customs, conventions and tabus all blend together in intricate ways to determine daily procedure.

The role of the state as an agency of control in economic activity has long been a point at issue. In the nineteenth century reformers were inclined to rely largely upon the state for remedial action. The socialists of the period were state socialists. But in recent years there has been a marked tendency to rely upon more flexible and mobile instruments of economic control. This is due partly to the changing conception of the state as expressed in syndicalism and guild socialism but more to the fact that, while the war gave stimulus to the idea of cooperative action for a common goal, war experience also suggested that the state as administrator tended to be inelastic and clumsy. And while post-war problems emphasized the need of the guidance of rational policy as against the mechanics of free enterprise, state action was no longer seen as the only alternative to the absence of control.

The economic transformations initiated by the swift advance in technology call for cooperative action of a new kind and raise insistently the

vital query as to the appropriate form of control. It is becoming increasingly apparent that any number of individual judgments do not add up to a coherent policy in inaugurating a unified national power scheme or in dealing with a sick industry, such as coal, textiles or agriculture. The field for individuals acting in isolation has been rapidly shrinking. New instruments or agencies which shall express a point of view wider than that of the individual are needed to plan and to administer. This need for collective activity is well illustrated by the unemployment problem. We now see it as absurd, for example, to appeal to individual self-reliance and initiative to cure the industrial situation in Great Britain, where two million find themselves unemployed. In this as in other cases it is obviously the total situation which calls for control. But if planned guidance is to be the order of the day, what instrumentalities shall have it in charge? What interests shall be represented? Where shall be the locus of final authority? These are questions in which the problems of social control come to clearest focus. Certain trends of innovation in control are already discernible—an increasing participation of the workers in management, as witnessed by the whole gamut of schemes working toward “industrial democracy” and the setting up of administrative machinery apart from the state. It is significant, for instance, that in most countries the proposals for reorganizing the basic industries no longer read in terms of bureaucratic state administration but in terms of independent bodies, such as economic councils composed variously of representatives of consumers, technicians and workers, which function autonomously, giving to local units an important share in administrative responsibility.

Nothing is more characteristic of the modern period than the vast multiplication of voluntary extragovernmental agencies for the control of special aspects of the environment. One has only to think of the committees, societies, corporations, associations, clubs, conferences, leagues, organizations, institutes, foundations and bureaus—all advocating control of some particular aspect of the environment—to see what a vast area is thus covered. Proposals and counter-proposals, advocacy and protest abound. Modern life is largely reflected in this diversity of organization—from leagues to make us “air minded” to societies for the promotion of Mothers’ Day or for the establishment of modern accounting methods. A good deal of this agitation is of only passing value; much is canceled by counter-

propaganda; but some of it, such as the birth control movement, has profound social significance. The basic fact in the modern situation is that the idea of control has become familiar. “We have attained,” says John Dewey in his *Quest for Certainty* (New York 1929, p. 9), “at least subconsciously, a certain feeling of confidence; a feeling that control of the main conditions of fortune is, to an appreciable degree, passing into our own hands.”

But what of the aims of control? Where is conscious planning to lead? Is this welter of controls moving toward some commonly accepted value? It seems that at present social control is under the domination of a number of scattered and disconnected objectives. Certain of these objectives are concrete and can easily be defined, such as the abolition of war, the elimination of inefficiency in its various forms, a higher standard of living for the lower levels of population. Beyond these specific ends, however, there are other goals more vague and yet discernible as motivating influences, concepts such as freedom, equality, the creation of more desirable human types or the enrichment of human life. These more shadowy objectives vary with time and place; society advances first under one banner and then another. But among these activities it is at present hard to find any coherent interrelation or any dominating purpose. Rather men are torn and distracted by the conflict of controls. Whether they can ever be in command of the total process is a difficult question. To achieve greater coherence society must have prophets, poets and artists to give a vivid sense of new values and a host of economists, engineers and technicians who will translate these values into specific measures.

HELEN EVERETT

See: SOCIETY; SOCIAL PROCESS; INSTITUTION; CUSTOM; CONVENTIONS, SOCIAL; CHANGE, SOCIAL; EVOLUTION, SOCIAL; INDIVIDUALISM; LAISSEZ FAIRE; COLLECTIVISM; RATIONALISM; SCIENCE; NATIONAL ECONOMIC PLANNING; PUBLIC WELFARE.

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CORPORATION. A corporation is a form of organization which enables a group of individuals to act under a common name in carrying on one or more related enterprises, holding and managing property and distributing the profits or beneficial interests in such enterprises or property among the associates. Its structure is defined and sanctioned by a statute, charter or certificate granted by the state; its shares are transferable; its life is independent of the lives of the individuals; and its debts do not usually create a liability for the latter. Although the most familiar type is that engaged in business activities, corporations may also be the vehicle for carrying on charitable enterprises (*see* CHARITABLE TRUSTS; ENDOWMENTS AND FOUNDATIONS), cooperative non-profit enterprises, municipal and governmental operations (*see* MUNICIPAL CORPORATION; GOVERNMENT CORPORATIONS) and religious and social activities.

The corporation is of unknown antiquity. Under Roman law bodies corporate possessing common treasuries and legal personality separate and distinct from that of the individuals comprising them were well known. Such were, for example, the various municipal, religious, industrial and trading associations called *universitates*. The organization of such associations was practically uncontrolled under the republic; the requirement that all such corporations must have a license from the state dates from the empire, probably from the reign of Alexander Severus (c. 205–35 A.D.). This requirement was probably due to the tendency of some of the associations to develop political aspects and to the consequent desire of the government to keep close watch on all of them. After the Christianization of the empire the popes claimed that their fiat was necessary to the creation of bodies corporate within the church. Thus certain ecclesiastical entities such as abbeys, monasteries and bishoprics were recognized by the Roman Catholic church as possessed of perpetual succession and a continuing body of property despite a changing membership.

In Anglo-Saxon civilization corporations were known in the early Norman period and possibly existed at an earlier date. The classic theory is that they originated in England in two institutions: the early English borough—an association of inhabitants joined together for mutual defense and civic works; and the mediaeval guilds—associations of traders or craftsmen organized to forward their interests, to provide for needy members and in part to con-

trol their respective trades. Until recently it was supposed that these institutions were created by crown franchise, but it now seems well established that both boroughs and guilds developed gradually and that they subsequently—from the time of Henry VI—obtained legal status by securing from the king patents recognizing their corporate character. This question is significant in the light of the American legal theory that a corporation is purely a creation of the state.

From the standpoint of economic form and functioning, however, the modern corporation can probably be traced more directly to certain peculiar developments in the business of overseas trade. Because of the great risk attendant upon navigation a practise developed under which a number of associates contributed to the fitting out of a single ship. The value of the ship was divided into shares according to the contributions of the original participants in the voyage, and the profits were distributed proportionally. Such early associations were formed purely by agreement of the associates, who fixed the terms under which each contributed to the capital of the enterprise and by which power was delegated to a person or persons chosen to manage the undertaking. Special treatment was accorded such sea trading ventures under Greek and Roman law. Similar overseas trading corporations existed in the mediaeval Italian ports. They appeared in Genoa as early as the twelfth century. The rapid extension of commerce to distant lands after the middle of the sixteenth century stimulated their formation and they soon spread to Holland, the Hanse cities and England. The famous British East India Company, formed in 1600, at first carried on operations in the established manner; but in 1602 the Dutch East India Company, generally considered the first stock corporation, was organized in Holland with a permanent capital, and in 1612 the English company began to issue stock on a more permanent basis, steadily lengthening the period of time for which the stock was issued.

The development of corporations in England entered on a new phase with the accession of the Stuart kings. James I and his advisers, perhaps taking an analogy from the ecclesiastical organizations of the Catholic church which were created bodies corporate by the church law, are thought to have brought into English law the so-called fiat doctrine, the theory that corporations are fictitious legal persons distinct from their officers or members and created by the fiat of

the state. History hardly warranted this contention, but the doctrine enabled the crown to extend control to all corporations, including boroughs, guilds and trading companies. At the same time it permitted the crown to grant monopolies and privileges to corporations organized by court favorites. The doctrine gained strength from the vigorous support of Lord Coke (1552-1634). It soon became the accepted legal doctrine that a "corporation is a franchise"—a "freedom" or grant of special privilege. The privilege not only permitted a number of associates to carry on an enterprise in a common name, to have a common seal and to appear in the courts in their corporate capacity; it usually included a monopoly of some sort, such as the right to run a ferry or a mill, or the exclusive privilege of trading in a particular area subject only to the rivalry of companies granted similar monopoly rights by other countries. To secure such a privilege direct negotiations with the crown were required, culminating in a royal grant of a charter or patent. The colonization of America and the appropriation of India were achieved primarily through the medium of such chartered companies.

On the continent the corporation was in fact frequently created by the sovereign and endowed by him with certain special privileges. The organization of such corporations was subject to royal concession, and especially in Germany the sovereign was an active force in their promotion and financing. Under the mercantilist political philosophy they were frequently looked upon as arms of the state, performing for the state certain functions of a public character. But the first principle never became accepted legal doctrine as in England and was in fact discarded under the *Code Napoléon*.

The success of the joint stock form, demonstrated by the Dutch and English East India companies, led to its increasing use. Near the close of the seventeenth century England entered on a period of extensive joint stock corporate organization. In 1711 a corporation, huge for its day, was chartered and granted a monopoly of the trade with the South Sea islands. In France John Law formed the *Compagnie de la Louisiane ou d'Occident* in 1717 to take over the grant for the Mississippi trade. While Law's Mississippi company was stimulating speculation in France, the rise in value of the South Sea securities led to a tremendous wave of company promotion and speculation in England. The puncturing of these two gigantic bubbles in

1720 brought the stock corporation into disrepute. Corporations continued to be formed under special royal grant or legislative act, but a new economic stimulus was needed to restore the corporation as an important force in economic life.

In both Europe and America the development of the modern corporation appears to have received its impetus from the industrial revolution. Economic expansion demanded larger economic units. Railway building especially was one of the dominant forces seeking large capital. The participation by the French, German and Austrian branches of the house of Rothschild in commercial as distinguished from governmental finance emphasized the financial aspect of the corporation. All over the continent banks in corporate form on the model of the *Crédit Mobilier*, organized in Paris in 1852, were established to help in organizing corporations. The organization of the steel enterprises in the Ruhr in Germany, the Schneider enterprises in France and the Skoda works in Austria were forerunners of the large scale industrial corporations of today. The corporation as the principal means of providing necessary large capital acquired increasing economic importance and more definite and liberal legal recognition.

France led the way in the liberalization of corporate law. In continental law a distinction had early appeared between two types of property owning entities. One was the "community," described as a purely passive property holding device, without hope of profit, whose distinctive characteristic was its maintenance of a body of property for common use but individual ends. Such was, for example, a quasi-corporate institution originating in Spain and on the whole limited to Spanish territory—the institution of land owned in common for a particular purpose, such as a sheep or cattle run, with ownership vested in a guild like the *mesta*, or wool growers' association. The other was the *société*—an active enterprise having, as Pothier observes, "... an ulterior and common end which was to acquire property, to realize profits, the association of the parties being only a means toward this end." At the time of the French Revolution the difference between these was recognized: in the community each associate had a right only to division or partition, whereas in a true association each associate had rights *pro socio*; that is, a right to insist that the concern be actively run for his benefit, that he be fairly dealt with and that he share in the profits.

A *société* (the generic name for all types of profit seeking associations from a partnership up to a true share capital corporation) was constituted by an active contract between the parties, and the parties were considered the shareholders. The entity resulted only from the segregation of a common enterprise and a common body of property coupled with a common administration. In this aspect the administration of the concern was more nearly a joint agency. Continental law, however, found the entity not in the legal form but in the enterprise; thus although the legal *société* may be reformed or entirely broken up, as by bankruptcy, the entity may persist where there is a defined enterprise which continues in existence. This realization that an economic unit maintains its existence in large measure irrespective of individuals or of legal machinery for its administration is well known now to economists in England and America, although its legal implications have never been adopted into Anglo-American law.

The modern French corporation takes its form essentially from the *Code de commerce* of 1807 (bk. i, title 3), which sets up three classes of commercial societies: the partnership (*société en nom collectif*), the limited partnership (*société en commandite*) and the share corporation (*société anonyme*). The *société anonyme* derived its name from the fact that the name of none of the associates could appear in the corporate title. Personal credit was not in theory to enter into its operations; it was strictly a body of property managed under common rules by officials subject to an administrative board; the shareholders had no personal liability; interests were distributed by means of shares of stock with voting rights. But unlike American stock securities these could be issued to bearer. This is the usual method of issuing stock in Europe today. Until 1867 the specific authorization of the government was required for the formation of a *société anonyme*. The thorough revision of French corporation law which took place in that year abolished the requirement for state authorization. A *société anonyme* is now formed by a contract witnessed by a notary and so registered as to be a public act; the articles of association are deposited with public registrars and made available for inspection by interested persons. French law was again revised in 1893, 1903, 1907 and 1917, and there have been many minor amendments. In 1917 the law authorized an arrangement by which the workers might participate in the corporate profits, permitting the creation of

"labor shares" which were not freely transmissible.

The conception that incorporation was a special concession specifically granted by the government to specific enterprises continued as a general feature of German law, except in the Hanse cities and a few other states, until the law of 1870 established the principle of the freedom of corporate organization. This freedom was subject only to compliance with certain normative provisions intended to protect stockholders and creditors. A period of widespread company speculation, culminating in the crash of 1873, brought demands for reform, and the thorough revision of 1884 set the fundamental character of modern German corporation law. It retained the principle of freedom of incorporation but safeguarded the organization of the company by provisions for publicity of its proceedings and liability on the part of the founders, and the operation of the company by provisions for liability, civil and criminal, on the part of the members of the managing body (*Vorstand*), the controlling body (*Aufsichtsrat*) and under some circumstances the stockholders. The law was revised in 1897 and modified at other times, especially temporarily during the World War.

In England the Bubble Act, passed in 1719 to stop the formation of joint stock companies not possessing a charter from the king or Parliament, was not repealed until 1825. Incorporation continued to be a matter of special grant by king or Parliament until 1844, when associations with more than twenty-five members were permitted to register as corporations. Limited liability was not accorded such corporations until 1855. The laws regulating joint stock companies with limited liability were consolidated in 1862 and again in 1908 and 1929.

In America the corporation has developed along distinctive lines and to a more advanced stage than elsewhere. Many of the American colonies had their inception in a trading grant to certain associates; these developed into governmental corporations and ultimately into political entities. In spite of the strong prejudice against business corporations some fifteen or eighteen of these can be traced prior to 1789. The revolution left the common law intact in the American states, thus perpetuating the principle that a corporation is a franchise but granted by the sovereignty of the state instead of by the crown. A number of stock corporations organized for business purposes appeared prior to 1800; the process of chartering them was sub-

stantially the same as that used in England except that the organizers dealt only with a legislature or a legislative committee. Most of these corporations desired special privileges from the state, such as the right to condemn land by eminent domain for canals and turnpikes or to issue banknotes or to occupy shore lands for wharves. Corporations later appeared which asked nothing save the right to have a corporate name and seal and the privilege of limited liability. Fear of monopolies, however, led the legislatures to restrict quite closely the powers granted to corporations in their charters.

With the disappearance of the demand for the grant of distinctive state privileges the function of the state in the creation of these corporations became obscure. The justification for the fiat theory came to rest primarily on the so-called grant of limited liability. So long as a corporation required a state privilege, there was ground for believing that the state maintained unlimited control or even that the corporation was in some sense an agency of the state itself. But limited liability is not necessarily a privilege granted by the state, since it can be obtained by the agreement of each creditor of the corporation that he will look only to the corporate assets and not to the individual property of the associates or stockholders. Many of the early charters did not involve limited liability, and in California at the present time the limitation is far from complete.

Beginning with the New York law of 1811 the states began to substitute general incorporation laws for the process of negotiating with the state legislature for a charter. The change was due to the inconvenience of the older system, the attendant legislative corruption and the danger of the grant of valuable public privileges to private corporations. The laws permitted organizers of corporations to write out their own charter in accordance with statutory requirements and to file this with an officer of the state, usually the secretary of state. Incorporation followed automatically upon filing of the application. Where special privileges were necessary, as where a railroad desired the privilege of condemning land, recourse to the legislature was still necessary. The laws laid down rigid requirements designed to protect creditors, some of which operated incidentally to protect the stockholders. Chief among the requirements were those that a certain amount of capital should be paid in before business was started, that stock should have a par value and should not be issued except against payment of such par value,

that capital could not be reduced or paid out as dividends to the prejudice of creditors, and that original holders of stock who had not paid full par value for their stock were liable to creditors to the extent to which they had underpaid for their stock. The securities which could be issued were rigidly delimited. By 1850 such general incorporation laws were common and by 1875 they provided the usual method of incorporation.

Meantime corporation managers found it necessary to ask constantly broadening powers for the operation of their enterprise. Consequently charters included grants of powers primarily adapted to the particular enterprise but empowering the corporation to do almost anything imaginable. With the advent of the first large American corporations about 1845, formed to operate the railroad systems, managers were faced by the constant need of raising additional capital in large quantities. They accordingly sought power to alter and vary the participation rights of shares of stock already floated or about to be issued. If, for example, a railroad financed by common stock needed additional capital and preferred stock was a convenient method of raising this, the corporate manager desired authority to issue preferred stock ahead of the existing and outstanding common, although this necessarily changed to some extent the rights of the common shareholders. As early as 1865 we find the germ of the modern conception of corporate power—the belief that the rights of the participants as well as the technical conduct of the business must be subject to managerial discretion. The grant of power to a corporation (which means, in reality, to its board of directors and senior officers) to vary participation, to change the rights of stockholders and to alter the apparent contract rights of such stockholders represented a very drastic grant of authority. On the theory that the state infused its life into all departments of the corporation the argument was at once made that any action taken by the corporate management was in some sense action by the state itself, although in fact the action was based primarily on the interests of the corporate management.

The common law had supplemented the doctrine of a state franchise with the doctrine that a corporate charter was a contract. This is still the law. The contract is in theory an agreement between the state and the corporation, the corporation and the stockholders and among the stockholders themselves. Logically much of this theory cannot be supported, but it is still ac-

cepted. The contract is said to include the charter and the general corporation law governing the charter; and stockholders by subscribing to or purchasing stock are held to have assented in all respects to the charter and to the law. So long as the law was itself rigid and required a rigid charter, this was perhaps not burdensome. But as corporate activities extended and as general incorporation laws became increasingly loose, permitting corporate organizers to write almost any clause they desired into their charters, the corporate charter became an extremely one-sided document, granting to corporate management the most extreme powers not only to operate the business but also to alter or take away preexisting rights of stockholders.

The history of the nineteenth century in American corporation law is in fact that of a slow abdication by the state of control over corporations. The process was hastened by the multiplicity of chartering agencies in the United States. Control of corporations was primarily vested in the individual states. For most purposes the charter granted by one state was equally effective for carrying on corporate business in others. Individuals seeking a corporate charter went to the state granting the broadest powers. Certain states became known as "charter mongers," and the competition among them for the income derived from this source resulted in the granting of ever broader powers to the corporations and especially to corporate management. The process may be said to have been completed upon the enactment by certain states (notably Delaware, Maryland and Nevada) of general corporation laws permitting extreme latitude to corporate management, an opportunity promptly seized by corporations which in increasing size and number have used such states for their incorporation. The increase of management power has roughly paralleled the increasing size of corporate enterprise, thereby setting the stage for the corporate system of today.

In practise the business corporation in the United States appears in two forms, the private and the quasi-public corporation. These are so essentially different in character that they must be regarded as distinct institutions. No sharp dividing line separates the two, but the difference becomes evident when more or less extreme types of corporations are considered. An individual can incorporate his private business, thereby setting up a legal alter ego as the nominal vehicle for its conduct. His business will

remain as before except for such legal changes as the limitation of liability, the new tax status and the necessity that it be managed at least nominally through a board of directors. In essence it remains a private business. In contrast, the corporation may be employed to combine the capital of many investors secured through the public securities markets into a single enterprise, bringing great aggregates of wealth under a single control. In this form the corporation assumes a quasi-public character and gives rise to problems of economic and social organization of far reaching importance.

The most obvious and pressing of these problems is the inevitable separation of ownership and control which the quasi-public corporation involves. The functions of the entrepreneur become divided. The single owner of a private business, exercising all the functions of the entrepreneur—supplying the capital, taking the risk, managing the property, receiving the profits and exercising ultimate control over all—is replaced by two groups each exercising certain of these functions. One group, the security holders, supplies the capital, takes the risk and presumably receives the profits without exercising any appreciable degree of management or control over the enterprise or over the capital which they have contributed. Control rests rather with a group which can dictate the choice of all or a majority of the board of directors and which therefore exercises ultimate authority over the enterprise, authority almost princely in its extent, almost despotic in its character but frequently due only in a negligible degree to ownership in the enterprise.

The first stage in this separation of ownership and control is that in which the ownership of a majority of the voting stock of a corporation lies in the hands of an individual or small group while the remaining stock is scattered. In such a case control is in large measure combined with ownership and the controlling group is able to maintain its position almost indefinitely. At the same time the minority stockholders are virtually without a voice in the management of the company except where they have the legal right to elect a minority of the board of directors, a rare provision. Their interests may be protected to a very considerable degree, however, by the large proportion of ownership held by those in control. Where the major interests of those in control, however, are in some other business, similar or related, the large proportion of ownership in their hands may be of little protec-

tion to the minority owners. This is especially true where the corporation is the subsidiary of another corporation engaged in the same type of activity.

There are various devices through which control may be further separated from ownership. One is the voting trust, or the pooling of a majority of the stock in the hands of trustees having power to vote it. The most recently adopted device has been the disfranchising of all save a very small class of stock, a device used notably by the banking house of Dillon, Read and Company in its reorganization of Dodge Brothers Motor Company. The use of this device of non-voting stock has, however, received a setback owing to the hostility of the New York Stock Exchange. A familiar and popular device is that of the pyramided holding company, best typified by the system through which the Van Sweringen brothers maintain control of their transcontinental railway system. Reduced to its simplest terms this device involves the control of one corporation by a second smaller corporation through majority stock ownership, the control of the second by a third still smaller and so on. By sufficiently pyramiding the chain of holding companies a very small investment may achieve control of a tremendous aggregation of corporate capital. This is the typical process by which the large public utility systems have been built up. By these devices legal control can be maintained almost as effectually as by majority ownership, yet with only a small proportion of the investment which the latter would involve. The minority of disfranchised stockholders can rely on the ownership interest of control to a much smaller extent; and only in the case of the voting trust, where trustees assume acknowledged fiduciary responsibility, is the stockholder given partially compensating protection.

Control although of a somewhat more precarious nature can be maintained through the ownership of a large minority interest. Where the ownership of the remaining stock is widely scattered, 15 or 20 percent of the voting stock may be sufficient to perpetuate a control already established. If contested, however, its continuance may depend upon the active good will of many other stockholders. The larger the corporation and the more widespread the ownership the more easily is such control retained.

The most significant form of control is management control, which rests primarily on the power to use the proxy machinery. Where ownership is so widespread that no one indi-

vidual or small group owns more than a very minor fraction of the voting stock, the management—the board of directors and senior officers—may retain their control without appreciable ownership. The board of directors although in theory elected by the stockholders is in practise elected by “proxies,” or agents named by the stockholders to act for them at the annual election. Prior to that election the management sends a proxy slip to each stockholder proposing a certain individual as his proxy. Stockholders rarely either attend meetings or name proxies other than those suggested by the management; the latter therefore receive the power to vote most of the stock represented at the election. Armed with these powers they attend the annual meeting and elect their slate of directors. Control can be wrested from the management only through the purchase of a majority of the voting stock or through a proxy fight, in which outside interests establish a committee and seek proxies from the stockholders in competition with the committee sponsored by the existing management. Where the volume of stock outstanding is very large the capital investment necessary to purchase a majority would almost prohibit such action, while a proxy fight against an existing management is both very expensive and likely to be unsuccessful except when the corporation has been seriously mismanaged. The difficulty is increased by the fact that the expenses incurred by the existing control in maintaining its position are paid out of the corporation treasury. The larger the corporation and the more widely distributed the stock, the more easily can an existing management retain its position through control of the proxy machinery. Such a management becomes virtually a self-perpetuating body. Such control without appreciable ownership has already been attained in many large American corporations, such as the American Telephone and Telegraph Company, the General Electric Company, the Pennsylvania Railroad and the United States Steel Corporation, and it appears to be the form toward which the modern corporation is tending. In such a corporation the separation of ownership and control is well nigh complete. The stockholders no longer hold the position of partners in an enterprise; they have joined the bondholders as suppliers of capital. They are merely lenders of capital with a return which is not fixed but contingent upon the will of those in control. Their right to vote has become a right to revolution rather than a method of control.

Interests in the property of these great quasi-public corporations are represented by a variety of securities, which are for the most part held by public investors and bought and sold in the public markets. Primarily these securities represent possible participations in the future earnings and assets of the various corporations. They range in an almost continuous hierarchy from gilt edged bonds having a fixed return and bearing almost no risk, through stocks having greater opportunity of return with greater risk, to the newest instrument of finance, stock purchase warrants, having possibilities of the highest return but involving a most extreme degree of risk. The law divides them arbitrarily into three classes: obligations which are in theory debts of the corporation; stocks which are in theory rights to participate in the earnings and in case of dissolution in the assets of the corporation; and stock purchase warrants which are options with a legal status yet to be defined. It has likewise been customary in the past for economists to distinguish between bonds which were loans and stocks which were a form of partnership in an enterprise (warrants are too new to have been considered) and to assume that they required quite different treatment.

While such a distinction could properly be drawn in the case of a private corporation it has ceased to have meaning with regard to the quasi-public corporation. From the economic point of view this sharp distinction between bonds and stock has disappeared. Each has tended to become more like the other. Formerly the bondholder looked for his safety to the physical property of the corporation. He was safe whether the company was operated well or badly, since if his principal and interest requirements were not met he could seize the company's tangible property, sell it and thus protect himself against loss. Some bonds are still of this nature, but as corporations have increased in size and complexity their wealth has tended to take less the form of tangible goods and more the form of an organization built up in the past and available for use in the future. Even the tangible goods have come to have value primarily because of their organized relationship within the company. The value of the company's property is therefore in the main dependent on continued operation. If the company is dismembered the value of the organization disappears, and the tangible property has little more than scrap value. The expectation of interest and ultimate return of principal must rest upon the

profitable operation of the business. From the economic point of view the bondholder may thus be regarded as a participant in the enterprise with a fixed return and priority over the stockholder in both interest and principal.

The hierarchy of securities introduces an element into the modern corporation with which neither the lawyer, the economist nor the business man has effectively coped. In theory the participants in a corporation are all working toward a common end. In practise the varied claims of different security holders are frequently and perhaps necessarily hostile to each other. Thus bondholders will wish limitation of operation and conservative management in the direction of safety of their principal and interest. But a class B stockholder, who has a security costing him little and with little or no equity behind it, will wish the corporation to take extremely long chances on the theory that he has little to lose and everything to gain. Management is required to harmonize all of these interests. It is only too easy, however, to sacrifice one group within the corporation for the benefit of another and only too human for the management to be influenced by its private interest in particular classes of securities.

The new power of management to apportion earnings and assets between the various participants in the corporation is obviously distinct from the old common law power to manage the enterprise. It has no close connection with the power to run a plant, to determine the selling prices of goods, settle effective operating policies or the like. All of these policies may remain unaltered, but under cover of a continuous uniform and profitable operation various legal devices may permit the management to enhance the value of one class of securities at the expense of another.

Thus the corporation may be financed with non-cumulative preferred stock and common stock. Under the rule in the federal courts a non-cumulative dividend although earned is lost forever if it is not declared. But the discretion of directors to declare or not to declare dividends on such stock is almost absolute. It is thus possible for the directors of a corporation which is earning profits to withhold dividends on the preferred stock year after year, building up an equity in the common stock out of the dividends so withheld. Again under the laws of certain states, notably Delaware, a fairly large proportion of the consideration paid for stock may be assigned as "paid in surplus"—immediately

available as dividends. Where a large proportion of the consideration paid for the issue of preferred stock only has been assigned as paid in surplus and dividends are declared for both preferred and common stock, the effect is to turn over to the common stockholder a part of the capital contributed by the preferred stockholders.

To meet these possibilities of exploitation the legal doctrine is slowly being developed that all powers granted to the management to shift property interests in earnings or in assets must be considered as having been granted as powers in trust to be used only for the general benefit of all concerned. It is thought by some students of corporation law that the law will ultimately cope with such powers by declining to sanction their use except where it is shown to be reasonably necessary for the benefit of the enterprise as a whole and where the interests of no class of security holders are unduly sacrificed. But this doctrine is still in its infancy, and the difficulty of legal enforcement is great.

The stockholder's position is further weakened by a curious development in American law. The individuals who constitute the management owe to the corporation certain fairly well defined duties. They must act with reasonable business prudence. They must be reasonably diligent. They must not acquire an interest adverse to that of the corporation in any transaction on which they may be called to pass in its behalf. Thus directors cannot be merely passive and shelter themselves from the claim of mismanagement by pleading inattention to the company's affairs. Nor can directors purchase property and resell it to the corporation at a profit. While this standard of fidelity is somewhat modified in the modern law, there is no marked tendency to eliminate the original demands made upon the persons actively conducting the corporation's affairs. But the law has introduced a metaphysical distinction. These liabilities, it is said, have to do only with the corporation and not with the individual shareholders of the corporation. Accordingly, the shifting of interests within the corporation from preferred to common stockholders or the like does not fall within the normal legal doctrine. The corporation as such is not hurt if one block of assets is transferred from one class of stock to another; the total corporate assets remain the same. There is a damage to one group of shareholders; there is none to the corporation. Hence there is no liability on the part of the directors.

The usual security holder in America is thus slowly being reduced by these devices and interpretations to a point where he becomes a petitioner for the wages of capital. He is safeguarded rather by business ethics and policy than by any easily enforceable right. In Europe the separation of ownership from control is growing, although it has not yet reached the stage which it has in the United States. The European corporation tends to be a more rigid unit and many of the devices worked out in the United States to secure varying participation in earnings and control are unknown in continental law. But the increasing use of many of these devices, together with the limitations placed upon individual corporations by the intercorporate combinations which are so common on the continent, places the shareholder in a position which approaches that of the American shareholder, who is, furthermore, probably far more likely to attempt to vindicate his rights in courts than is the European. In Germany especially the problem of the divergence between the corporation and its stockholders has become an increasingly important problem. Walter Rathenau in *Von kommenden Dingen* (Berlin 1918; tr. by Eden and Cedar Paul, London 1921, p. 119-22) suggested that corporate enterprises had reached a stage where they were almost nameless, soulless and without any individual objective; he suggested the logical possibility that a corporation might even own all of its shares, continuing as a self-perpetuating organization of men working for an idea as abstract as the concept of the nation.

The true significance of the corporation can best be seen in the light of the development of business in the last three centuries from the extreme individualism of private enterprise to the collective activity of the modern giant corporation. The corporate system has done to capital what the factory system did to labor. As the factory system separated control from labor, so the corporate system has separated control from ownership. The one brought the labor of a multitude of workers under a single control, the other is bringing the wealth of countless owners under the same unified control. The limits to the size of the business unit have thus been extended far beyond the bounds of the wealth of the individual or partnership, as they were before extended beyond the bounds of the labor of a single worker and his apprentices. The economic areas within which production can be conducted on a rational coordinated basis be-

come limited only by the ability of a few individuals to administer successfully the huge organization of workers and of wealth which can be brought under their control.

The centering of economic activity in the hands of a few giant corporations has already progressed far and is continuing at a rapid rate. Corporations today carry on most of industrial and an increasingly large part of commercial activity. While a great many of these are private in character, the bulk of corporate wealth is in quasi-public corporations. In 1927 nearly half of the wealth and income of corporations (not including banks and other financial corporations) was owned or controlled by two hundred companies, for the most part quasi-public in character. The relative growth of the large companies in the last twenty years has been such that if the same rate were maintained all corporate wealth would be in the hands of two hundred companies within fifty years—a concentration of economic power unknown in the world's history, unless it be compared to the present control of Soviet Russia.

The development of large scale business, predicated in the modern world primarily upon the quasi-public corporation, has raised problems of the new relationship of business to the workers and to the consumer. With the increase in the scale of business more and more individuals who might have been independent entrepreneurs have become major or minor executives without the independence and the full spur of business profits inherent in private enterprise. At the same time the individual laborer works for a distant management which tends to assume in his eyes the form of an impersonal force rather than the direct individuality of the owner of a private business. The very strength of the quasi-public corporation as an employer weakens the bargaining position of the workers even when organized, makes organization more essential to their welfare and is often used to make impossible or to destroy such independent organizations or to replace them with dependent or "company" unions. These same factors, however, may make possible a more rational planning of production with greater stability of employment. A few corporations have advanced far in this direction: some plan their work on a long time schedule in order to have full time work for the bulk of their employees; others insure against unemployment; still others guarantee practically full time employment to all but their newest workers. On the

other hand, some corporations have aggravated the instability of employment. It has yet to be proved that the corporate system as a whole has provided the worker with any greater economic stability.

The position of the consumer like that of the worker has been weakened by the size of these organizations. He has to deal with a great impersonal institution which considers its consumers in statistical tables and averages, as types and not as individuals; which is weighed down with rules and regulations; which may have a very considerable control over prices, either monopolistic or duopolistic in nature; and which supplies standard goods or services throughout national or international markets. At the same time the size of the corporations may through the possibilities of research and mass production supply a type of product or service of a quality and cheapness quite beyond the power of smaller companies.

Control of the relations of big business to the consumer and the worker necessarily involves control of the quasi-public corporation, the form which modern large scale business usually takes. When the state has attempted to regulate the business of the corporation it has done so primarily from the standpoint of state policy toward monopoly, unfair competition and public utilities. This regulation has been extended into other fields, such as those of finance and labor relations. But the bulk of corporate activity today is unregulated. The entire problem of the relations of government to large scale business as represented by the giant corporations remains controversial. In the United States especially there is vigorous opposition to any attempt by the state to regulate the activities of corporate business as such and considerable cynicism as to the ability of the state to intervene effectively.

The corporation has become more than a method of doing business; it has assumed the aspect of an institution of social organization comparable to the state itself. During the Middle Ages the church, exercising spiritual power, dominated Europe and gave to it unity at a time when both political and economic power were diffused. With the rise of the modern state political power became concentrated into a few large units and challenged the spiritual interest as the strongest bond of human society. Out of the long struggle between church and state which followed, the state emerged victorious and nationalist politics superseded religion as the

major unifying force of the western world. Economic power still remained diffused.

The rise of the modern corporation has brought a concentration of economic power which can cope on equal terms with the modern state—economic power versus political power, each strong in its own field. The state seeks in some aspects to regulate the corporation, while the corporation, steadily becoming more powerful, seeks independence and not infrequently endeavors to avail itself through indirect influence of governmental power. Not impossibly the economic organism, now typified by the corporation, may win equality with the state and perhaps even supersede it as the dominant institution of social organization. The law of corporations, accordingly, might well be considered as a potential constitutional law for the new economic state; while business practise assumes many of the aspects of administrative government.

A. A. BERLE, JR.
GARDINER C. MEANS

See: ASSOCIATION; VOLUNTARY ASSOCIATION; GUILDS; CHARTERED COMPANIES; JOINT STOCK COMPANY; PARTNERSHIP; COMBINATIONS, INDUSTRIAL; HOLDING COMPANY; TRUSTS; CORPORATION FINANCE; CORPORATION TAXES; FOREIGN CORPORATIONS; ULTRA VIRES; GOVERNMENT CORPORATIONS; PUBLIC UTILITIES; GOVERNMENT REGULATION OF INDUSTRY; BUSINESS; CAPITALISM; INDUSTRIALISM; ECONOMIC ORGANIZATION.

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CORPORATION FINANCE deals with the financial problems of corporate enterprises. These problems include the financial aspects of the promotion of new enterprises and their administration during early development; the accounting problems connected with the distinction between capital and income; the administrative questions created by growth and expansion; and finally the financial adjustments required for the bolstering up or rehabilitation of a corporation which has come into financial difficulties. Three phenomena of our time have constantly augmented the social importance of corporation finance: the extent to which business today is corporately organized, the widening distribution of corporation ownership and the increasing tendency to separation of ownership and management.

The extent of corporate organization can be indicated by a few summary figures. In the United States all railroads and the great majority of public utilities are organized as corporations, while about nine tenths of the total manufactures are produced by corporations. The numerous mergers of the post-war period have reduced the total number of corporations, increased their average size and correspondingly complicated their financial structure. No single individual could furnish capital for the huge enterprises of today. For instance, the capitaliza-

techniques which cultivate it in the belief that much good accrues from such action to the cultivator. Hence the Browning cults and the Shakespeare cults, the cults of beauty, of health, of atheism, of communism, of the constitution. Hence too the overtone of invidiousness and depreciation which now attaches to the word cult. To say cult is often to imply an upstart or déclassé religion, a worship not quite proper, without the correct sanctions, a pretender religion, suspect to the public opinion of the particular society in which it sets up for business. If it gain in numbers, wealth and power it ceases to be a cult and becomes a religion. Cult, again, is the other fellow's worship, not one's own; Protestants refer to Roman Catholicism as a cult but not to Protestantisms; Catholics deny that Protestantism is Christian at all; and agnostics and infidels will decry all religions as cults.

HORACE M. KALLEN

See: RELIGION; RELIGIOUS INSTITUTIONS; SECTS; RITUAL; SAINTHOOD; DIABOLISM; REVIVALS, RELIGIOUS; PROSELYTISM; APOSTASY AND HERESY.

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CULTURAL GEOGRAPHY. *See* GEOGRAPHY.

CULTURE. Man varies in two respects: in physical form and in social heritage, or culture. The science of physical anthropology, employing a complex apparatus of definitions, descriptions and terminologies and somewhat more precise methods than common sense and untutored observation, has succeeded in cataloguing the various branches of mankind according to their bodily structure and physiological characteristics. But man varies also in an entirely different aspect. A pure blooded Negro

infant, transported to France and brought up there, would differ profoundly from what he would have been if reared in the jungle of his native land. He would have been given a different social heritage: a different language, different habits, ideas and beliefs; he would have been incorporated into a different social organization and cultural setting. This social heritage is the key concept of cultural anthropology, the other branch of the comparative study of man. It is usually called culture in modern anthropology and social science. The word culture is at times used synonymously with civilization, but it is better to use the two terms distinctively, reserving civilization for a special aspect of more advanced cultures. Culture comprises inherited artifacts, goods, technical processes, ideas, habits and values. Social organization cannot be really understood except as a part of culture; and all special lines of inquiry referring to human activities, human groupings and human ideas and beliefs can meet and become cross fertilized in the comparative study of cultures.

Man in order to live continually alters his surroundings. On all points of contact with the outer world he creates an artificial, secondary environment. He makes houses or constructs shelters; he prepares his food more or less elaborately, procuring it by means of weapons and implements; he makes roads and uses means of transport. Were man to rely on his anatomical equipment exclusively, he would soon be destroyed or perish from hunger and exposure. Defense, feeding, movement in space, all physiological and spiritual needs, are satisfied indirectly by means of artifacts even in the most primitive modes of human life. The man of nature, the *Naturmensch*, does not exist.

This material outfit of man—his artifacts, his buildings, his sailing craft, his implements and weapons, the liturgical paraphernalia of his magic and religion—are one and all the most obvious and tangible aspects of culture. They define its level and they constitute its effectiveness. The material equipment of culture is not, however, a force in itself. Knowledge is necessary in the production, management and use of artifacts, implements, weapons and other constructions and is essentially connected with mental and moral discipline, of which religion, laws and ethical rules are the ultimate source. The handling and possession of goods imply also the appreciation of their value. The manipulation of implements and the consumption of goods also require cooperation. Common work

and common enjoyment of its results are always based on a definite type of social organization. Thus material culture requires a complement less simple, less easily catalogued or analyzed, consisting of the body of intellectual knowledge, of the system of moral, spiritual and economic values, of social organization and of language. On the other hand, material culture is an indispensable apparatus for the molding or conditioning of each generation of human beings. The secondary environment, the outfit of material culture, is a laboratory in which the reflexes, the impulses, the emotional tendencies of the organism are formed. The hands, arms, legs and eyes are adjusted by the use of implements to the proper technical skill necessary in a culture. The nervous processes are modified so as to yield the whole range of intellectual concepts, emotional types and sentiments which form the body of science, religion and morals prevalent in a community. As an important counterpart to these mental processes there are the modifications in the larynx and tongue which fix some of the crucial concepts and values by associating them with definite sounds. Artifact and custom are equally indispensable and they mutually produce and determine one another.

Language is often regarded as something distinct from both man's material possessions and his system of customs. This view is frequently coupled with a theory by which meaning is regarded as a mystical content of the word, which can be transmitted in utterance from one mind to another. But the meaning of a word is not mysteriously contained in it but is rather an active effect of the sound uttered within a context of situation. The utterance of sound is a significant act indispensable in all forms of human concerted action. It is a type of behavior strictly comparable to the handling of a tool, the wielding of a weapon, the performance of a ritual or the concluding of a contract. The use of words is in all these forms of human activity an indispensable correlate of manual and bodily behavior. The meaning of words consists in what they achieve by concerted action, the indirect handling of the environment through the direct action upon other organisms. Speech therefore is a bodily habit and is comparable to any other type of custom. The learning of language consists in the development of a system of conditioned reflexes which at the same time become conditioned stimuli. Speech is the production of articulate sounds, developed in childhood out of the inarticulate infantile utter-

ances which constitute the child's main endowment in dealing with his environment. As the individual grows his increase of linguistic knowledge runs parallel with his general development. A growing knowledge of technical processes is bound up with the learning of technical terms; the development of his tribal citizenship and social responsibility is accompanied by the acquisition of a sociological vocabulary and of polite speech, commands and legal phraseology; the growing experience of religious and moral values is associated with the development of ritual and ethical formulae. The full knowledge of language is the inevitable correlate of the full attainment of a tribal and cultural status. Language thus is an integral part of culture; it is not, however, a system of tools but rather a body of vocal customs.

Social organization is often regarded by sociologists as remaining outside culture, but the organization of social groups is a complex combination of material equipment and bodily customs which cannot be divorced from either its material or psychological substratum. Social organization is the standardized manner in which groups behave. But a social group consists always of individuals. The child, attached to its parents through the satisfaction of all its needs, grows up within the shelter of the parental house, hut or tent. The domestic hearth is the center around which the various necessities of warmth, comfort, food and companionship are satisfied. Later in every human society communal life is associated with the local settlement, the town, village or compound; it is localized within definite boundaries and associated with private and public activities of an economic, political and religious nature. In every organized activity therefore human beings are bound together by their connection with a definite portion of environment, by their association with a common shelter and by the fact that they carry out certain tasks in common. The concerted character of their behavior is the result of social rules, that is, customs, either sanctioned by explicit measures or working in an apparently automatic way. The sanctioned rules—laws, customs and manners—belong to the category of acquired bodily habits. The essence of moral values by which man is driven to definite behavior by inner compulsion has in religious and metaphysical thought been ascribed to conscience, the will of God or an inborn categorical imperative; while some sociologists have explained it as due to a supreme moral being—

society, or the collective soul. Moral motivation when viewed empirically consists in a disposition of the nervous system and of the whole organism to follow within given circumstances a line of behavior dictated by inner constraint which is due neither to innate impulses nor yet to obvious gains or utilities. The inner constraint is the result of the gradual training of the organism within a definite set of cultural conditions. The impulses, desires and ideas are within each society welded into specific systems, in psychology called sentiments. Such sentiments define the attitudes of a man toward the members of his group, above all his nearest kindred; toward the material objects of his surroundings; toward the country which he inhabits; toward the community with which he works; toward the realities of his magical, religious or metaphysical *Weltanschauung*. Fixed values or sentiments often condition human behavior so that man prefers death to surrender or compromise, pain to pleasure, abstention to satisfaction of desire. The formation of sentiments and thus of values is always based on the cultural apparatus in a society. Sentiments are formed over a long space of time and through a very gradual training or conditioning of the organism. They are based on forms of organization, very often world wide, such as the Christian church, the community of Islam, the empire, the flag—all symbols or catchwords, behind which, however, there exist vast and living cultural realities.

The understanding of culture is to be found in the process of its production by succeeding generations and in the way in which it produces in each new generation the appropriately molded organism. The metaphysical concepts of a group mind, collective sensorium or consciousness are due to an apparent antinomy of sociological reality: the psychological nature of human culture on the one hand and on the other the fact that culture transcends the individual. The fallacious solution of this antinomy is the theory that human minds combine or integrate and form a superindividual and yet essentially spiritual being. Durkheim's theory of moral constraint by the direct influence of the social being, the theories based on a collective unconscious and archetype of culture, such concepts as consciousness of kind or the inevitability of collective imitation, account for the psychological yet superindividual nature of social reality by introducing some theoretical metaphysical short cut.

The psychological nature of social reality is, however, due to the fact that its ultimate me-

dium is always the individual mind or nervous system. The collective elements are due to the sameness of reaction within the small groups which act as units of social organization by the process of conditioning and to the medium of material culture within which the conditioning takes place. The small groups which act as units because of their mental sameness are then integrated into the larger schemes of social organization by the principles of territorial distribution, cooperation and division into strata of material culture. Thus the reality of the superindividual consists in the body of material culture, which remains outside any individual and yet influences him in the ordinary physiological manner. There is nothing mystical therefore in the fact that culture is at the same time psychological and collective.

Culture is a reality *sui generis* and must be studied as such. The various sociologies which treat the subject matter of culture by way of the organic simile or in the likeness of a collective mind are irrelevant. Culture is a well organized unity divided into two fundamental aspects—a body of artifacts and a system of customs—but also obviously into further subdivisions or units. The analysis of culture into its component elements, the relation of these elements to one another and their relation to the needs of the human organism, to the environment and to the universally acknowledged human ends which they subserve are important problems of anthropology.

Anthropology has dealt with its material by two different methods, controlled by two incompatible conceptions of the growth and history of culture. The evolutionary school has regarded the growth of culture as a series of spontaneous metamorphoses proceeding according to definite laws and producing a fixed sequence of successive stages. This school took for granted the divisibility of culture into simple elements and it treated these elements as if they were units of the same order; it presented theories of the evolution of fire making side by side with accounts of how religion developed, versions of the origin and development of marriage and doctrines as to the development of pottery. Stages of economic development and steps in the evolution of domestic animals, of cutting implements and of ornamental design were formulated. Yet there is no doubt that, although certain implements have changed, passed through a sequence of stages and obeyed more or less definite laws of evolution, the

family, marriage or religious beliefs are not subject to any simple, dramatic metamorphoses. The fundamental institutions of human culture have changed not by way of sensational transformations but rather through an increasing differentiation of form in accordance with an increasingly definite function. Until the nature of the various cultural phenomena, their function and their form are understood and described more fully, it seems premature to speculate on possible origins and stages. The concepts of origins, stages, laws of development and growth of culture have remained nebulous and essentially non-empirical. The method of evolutionary anthropology was based primarily on the concept of survival, since this allowed the student to reconstruct past stages from present day conditions. The concept of survival, however, implies that a cultural arrangement can outlive its function. The better a certain type of culture is known, the fewer survivals there appear to be in it. Evolutionary inquiry should therefore be preceded by a functional analysis of culture.

The same criticism applies to the historical or diffusionist school, which attempts to reconstruct the history of human cultures mainly by tracing their diffusion. This school denies the importance of spontaneous evolution and maintains that cultures have been produced mainly by the imitation or taking over of artifacts and customs. The method of the school consists in a careful mapping out of cultural similarities over large portions of the globe and in speculative reconstructions as to how the similar units of culture have wandered from one place to another. The disputes of historical anthropologists (for there is little consensus between Elliot Smith and F. Boas; W. J. Perry and Pater Schmidt; Clark Wissler and Graebner; or Frobenius and Rivers) refer mostly to the questions as to where a type of culture originated, whither it moved and how it was transported. The difference is primarily due to the way in which each school conceives, on the one hand, the divisions of culture into its component parts and, on the other, the process of diffusion. This process has been very little studied in its present day manifestations, and it is only from the empirical study of contemporary diffusion that an answer can be found as to its past history. The method of division of culture into its component units, which are then supposed to diffuse, is even less satisfactory. The concepts of cultural traits, trait complexes and *Kultur-*

komplexe are indiscriminately applied to single utensils or implements, such as the boomerang, the bow or the fire drill, or to vague characteristics of material culture, such as megalithicity, sexual suggestiveness of the cowrie shell or certain details of objective form. Agriculture, the worship of fertility and enormous yet vague principles of social grouping, such as dual organization, the clan system or a type of religious cult, are regarded as single traits, that is, units of diffusion. But culture cannot be regarded as a fortuitous agglomerate of such traits. Only elements of the same order can be treated as identical units of argument; only compatible elements compound into a homogeneous whole. Insignificant details of material culture, on the one hand, social institutions and cultural values, on the other, must be treated differently. They are not invented in the same way, cannot be carried, diffused or implanted in the same manner.

The weakest point in the method of the historical school is the way in which its members establish the identity of cultural elements. For the whole problem of historical diffusion is raised by the occurrence of really or apparently identical traits or complexes in different areas. In order to establish the identity of two elements of culture the diffusionist uses the criteria of what might be called irrelevant form and fortuitous concatenation of elements respectively. The irrelevancy of form is a fundamental concept because form, which is dictated by inner necessity, could have developed independently. Complexes, naturally concatenated, could also be the product of independent evolution—hence the need to consider only fortuitously connected traits. Accidental concatenation, however, and irrelevant detail of form can, according to Graebner and his followers, be only the result of direct diffusion. But irrelevance of form and fortuitousness of concatenation are both negative assertions, which in the last instance mean that the form of an artifact or an institution cannot be accounted for or the concatenation between several elements of culture found. The historical method uses absence of knowledge as its basis of argument. To be valid its results must be preceded by a functional study of the given culture, which should exhaust all the possibilities of explaining form by function and of establishing relationships between the various elements of culture.

If culture in its material aspect is primarily a body of instrumental artifacts, it seems at first sight improbable that any culture should harbor

a great many irrelevant traits, survivals or fortuitous complexes either dumped down by some itinerant alien culture or handed over as survivals, useless fragments of a vanished stage. Still less is it likely that customs, institutions or moral values should present this necrotic or irrelevant character in which the evolutionary and diffusionist schools are primarily interested.

Culture consists of the body of commodities and instruments as well as of customs and bodily or mental habits which work directly or indirectly for the satisfaction of human needs. All the elements of culture, if this conception be true, must be at work, functioning, active, efficient. The essentially dynamic character of cultural elements and of their relations suggests that it is in the study of cultural function that the most important task of anthropology consists. The primary concern of functional anthropology is with the function of institutions, customs, implements and ideas. It holds that the cultural process is subject to laws and that the laws are to be found in the function of the real elements of culture. The atomizing or isolating treatment of cultural traits is regarded as sterile, because the significance of culture consists in the relation between its elements, and the existence of accidental or fortuitous culture complexes is not admitted.

To formulate a number of fundamental principles an example may be taken from material culture. The simplest artifact, extensively used in the simplest cultures, a plain stick, roughly trimmed, some five to six feet long, such as can be used for digging up roots or in the cultivation of the soil, for punting or in walking, is an ideal element or trait of culture for it has a fixed, simple form, is apparently a self-contained unit and is very important in every culture. To define the cultural identity of a stick by its form, by describing its material, its length, its weight, its color or any other physical characteristics—by describing it in fact according to the final criterion of form as it is used by the diffusionist—would be a methodically erroneous procedure. The digging stick is handled in its own way; it is used in a garden or in the bush for a special purpose; it is procured and discarded in a somewhat careless manner—for a single specimen has usually very small economic value. But the digging stick looms large in the economic scheme of every community in which it is used as well as in folklore, mythology and customs. A stick of identical form can be used in the same culture as a punting pole, a walking staff or a rudimentary

weapon. But in each of these specific uses the stick is embedded in a different cultural context; that is, put to different uses, surrounded with different ideas, given a different cultural value and as a rule designated by a different name. In each case it forms an integral part of a different system of standardized human activities. In brief, it fulfils a different function. It is the diversity of function not the identity of form that is relevant to the student of culture. The stick exists as a part of culture only in so far as it is used in human activities, in so far as it serves human needs; and therefore the digging stick, the walking staff, the punting pole, although they may be identical in physical nature, are each a distinct element of culture. For the simplest as well as the most elaborate artifact is defined by its function, the part which it plays within a system of human activities; it is defined by the ideas which are connected with it and by the values which surround it.

This conclusion receives its importance from the fact that the systems of activities to which material objects are referred are not fortuitous but are organized, well determined, comparable systems found throughout the world of cultural diversity. The cultural context of the digging stick, the system of agricultural activities, always presents the following component parts: a portion of territory is legally set aside for the use of a human group by the rules of land tenure. A body of traditional usages exists regulating the way in which this territory is to be cultivated. Technical rules, ceremonial and ritual usages determine in every culture what plants are to be grown; how the ground is to be cleared, the soil prepared and fertilized; how the work is to proceed; how, when and by whom the magical acts or religious ceremonies are to be performed; how, finally, the crops are to be harvested, distributed, stored and consumed. Likewise the group of people who own the territory, the plant and the produce, who work together, enjoy and consume the results of their labors, are always well defined.

These are the characteristics of the institution of gardening as it is universally found wherever the environment is favorable to the cultivation of the soil and the level of culture sufficiently high to allow it. The fundamental identity of this organized system of activities is due primarily to the fact that it is built up around the satisfaction of a deep human need—the regular provision of staple food of a vegetable nature. The satisfaction of this need by agriculture,

which insures possibility of control, regularity of production and relative abundance, is so superior to any other food providing activity that it was bound to diffuse or to develop wherever conditions were favorable and the level of culture sufficiently high.

The fundamental uniformity in institutionalized gardening is due to yet another cause, the principle of limited possibilities, first laid down by Goldenweiser. Given a definite cultural need, the means of its satisfaction are small in number, and therefore the cultural arrangement which comes into being in response to the need is determined within narrow limits. Given the human need for a support, a rudimentary weapon and an implement for exploring in the dark, the material most suitable is wood, the only adequate shape thin and long, and a plentiful supply is accessible. Yet a sociology or cultural theory of the walking staff is possible, for the staff displays a diversity of uses, ideas and mystical associations and in its ornamental, ritual and symbolic developments becomes a part of important institutions such as magic, chieftainship and kingship.

The real component units of cultures which have a considerable degree of permanence, universality and independence are the organized systems of human activities called institutions. Every institution centers around a fundamental need, permanently unites a group of people in a cooperative task and has its particular body of doctrine and its technique of craft. Institutions are not correlated simply and directly to their functions: one need does not receive one satisfaction in one institution. But institutions show a pronounced amalgamation of functions and have a synthetic character. The local or territorial principle and relationship by procreation act as the most important integrative factors. Every institution is based on a material substratum of apportioned environment and of cultural apparatus.

To define cultural identity of any artifact is possible only by placing it within the cultural context of an institution, by showing how it functions culturally. A pointed stick, that is, a spear, used as a hunting weapon leads to the study of the type of hunting, as practised in a given culture, in which it functions, the legal rights of hunting, the organization of the team, the technique, the magical ritual, the distribution of the quarry, as well as the relation of the particular type of hunting to other types and the general importance of hunting within the econ-

omy of the tribe. Canoes have often been taken as characteristic traits for the establishment of cultural affinities and hence as a proof of diffusion because the form varies within a wide range and shows types of outstanding character, such as the canoe with single or double outrigger, the balsa, the kayak, the catamaran or the double canoe. And yet this complex artifact cannot be defined by form alone. The canoe, to the people who produce, possess, use and value it, is primarily a means to an end. They have to cross an expanse of water either because they live on small islands or in pile dwellings; or because they want to trade or have to fish or go to war; or because of the desire for exploration and adventure. The material object, the sailing craft, its form, its peculiarities, are determined by the special use to which it is put. Every use dictates a special system of sailing, that is, in the first place, the technique of using paddles, the steering oar, the mast, the rigging or the sail. Such techniques, however, are invariably based on knowledge: principles of stability, buoyancy, conditions of speed and response to steering. The form and structure of the canoe are closely related to the technique and manner of its use. Yet innumerable accounts of the mere form and structure of a canoe are available, while little is known about the technique of sailing and the relation of this to the particular use to which a canoe is put.

The canoe has also its sociology. Even when manned by a single person it is owned, produced, lent or hired, and in this the group as well as the individual is invariably implicated. But usually the canoe has to be handled by a crew and this entails the complex sociology of ownership, of division of functions, of rights and obligations. These are rendered more complex by the fact that a large vessel has to be produced communally, and production and ownership are usually related. All these facts, which are complex but regulated, which show several aspects, all of which are related according to definite rules, determine the form of the canoe. Form cannot be treated as a self-contained independent trait, accidental and irrelevant, diffusing alone without its context. All the assumptions, arguments and conclusions which concern the diffusion of an element and the spread of culture in general will have to be modified once it is acknowledged that what diffuse are institutions and not traits, forms or fortuitous complexes.

In the construction of seagoing craft there are certain stable elements of form determined by

the nature of the activity to which the craft is instrumental. There are certain variable elements due either to alternative possibilities of solution or else to less relevant details associated with any possible solution. This is a universal principle referring to all artifacts. The commodities used for the direct satisfaction of bodily needs or consumed in use must fulfil conditions laid down by the direct bodily need. Foodstuffs, for instance, are within certain limits determined by physiology; they must be nourishing, digestible, non-poisonous. They are of course also determined by environment and by the level of culture. Habitations, clothing, shelter, fire as source of warmth, light and dryness, weapons, sailing craft and roads are within limits determined by the bodily needs to which they are correlated. Implements, tools or machines which are used for the production of commodities have their nature and form defined by the purpose for which they are to be used. Cutting or scraping, joining or smashing, striking or driving, piercing or drilling, define the form of an object within narrow limits.

But variations occur within the limits imposed by the primary function, which causes the primary characters of an artifact to remain stable. There is no indefinite variation, but a fixed type occurs as if a choice had been made and then adhered to. In any seafaring community, for instance, there is not found an infinite variety of craft ranging from a simple hollowed log to a complicated outrigger; at most a few forms occur, differentiated by size and construction and also by social setting and purpose, and each traditional form is reproduced constantly to the smallest detail of decoration and constructive process.

Anthropology has so far concentrated its attention on these secondary regularities of form which cannot be accounted for by the primary function of the object. The regular occurrence of such apparently accidental details of form has raised the question whether they are due to independent invention or diffusion. But many such details are to be explained by the cultural context; that is, the special way in which an object is used by a man or a group of people, by the ideas, rites and ceremonial associations which surround its primary use. The ornamentation of a walking staff usually means that it has received within a culture a ceremonial or religious association. A digging stick may be weighted, sharply pointed or blunt, according to the character of the soil, the plants grown and

the type of cultivation. The explanation of the South Sea outrigger may be found in the fact that this arrangement gives the greatest stability, seaworthiness and manageability, considering the limitations in material and in technical handicraft of the Oceanic cultures.

The form of cultural objects is determined by direct bodily needs on the one hand and by instrumental uses on the other, but this division of needs and uses is neither complete nor satisfactory. The ceremonial staff used as a mark of rank or office is neither a tool nor a commodity, and customs, words and beliefs cannot be referred either to physiology or to the workshop.

Man like any animal must receive nourishment, and he has to propagate if he is to continue individually and racially. He must also have permanent safeguards against dangers coming from the physical environment, from animals or from other human beings. A whole range of necessary bodily comforts must be provided—shelter, warmth, a dry lair and means of cleanliness. The effective satisfaction of these primary bodily needs imposes or dictates to every culture a number of fundamental aspects; institutions for nutrition, or the commissariat; institutions for mating and propagation; and organizations for defense and comfort. The organic needs of man form the basic imperatives leading to the development of culture in that they compel every community to carry on a number of organized activities. Religion or magic, the maintenance of law or systems of knowledge and mythology occur with such persistent regularity in every culture that it must be assumed that they also are the result of some deep needs or imperatives.

The cultural mode of satisfaction of the biological needs of the human organism creates new conditions and thus imposes new cultural imperatives. With insignificant exceptions, desire for food does not bring man directly in touch with nature and force him to consume the fruits as they grow in the forest. In all cultures, however simple, staple food is prepared and cooked and eaten according to strict rules within a definite group and with the observance of manners, rights and tabus. It is usually obtained by more or less complicated, collectively carried out processes, such as agriculture, exchange or some system of social cooperation and communal distribution. In all this man is dependent on the artificially produced apparatus of weapons, agricultural implements, fishing craft and tackle. He is equally dependent upon organ-

ized cooperation and upon economic and moral values.

Thus out of the satisfaction of physiological needs there grow derived imperatives. Since they are essentially means to an end they may be called the instrumental imperatives of culture. These are as indispensable to man's commissariat, to the satisfaction of his nutritive needs, as the raw material of food and the processes of its ingestion. For man is so molded that if he were deprived of his economic organization and of his implements he would as effectively starve as if the substance of his foodstuffs were withdrawn from him.

From the biological point of view the continuity of race might be satisfied in a very simple manner: it would be enough for people to mate, to produce two or occasionally more children per couple, enough to insure that two individuals survive for every two who die. If biology alone controlled human procreation, people would mate by rules of physiology which are the same for the whole species; they would produce offspring in the natural course of pregnancy and childbirth; and the animal species man would have its typical family life, physiologically defined. The human family, the biological unit, would then present exactly the same constitution throughout humanity. It would also remain outside the scope of cultural science—as has been in fact postulated by many sociologists, notably by Durkheim. But instead, mating, that is, the system of courtship, love making and selection of consorts, is in every human society traditionally defined by the body of cultural customs prevalent in that community. There are rules which debar some people from marriage and make it desirable if not compulsory for others to marry; there are rules of chastity and rules of license; there are strictly cultural elements which blend with the natural impulse and produce an ideal of attractiveness which varies from one society and one culture to another. In place of a biologically determined uniformity a bewildering variety of sexual customs and courtship arrangements regulating mating exist. Marriage within each human culture is by no means a simple sexual union or even cohabitation of two people. It is invariably a legal contract defining the mode in which man and wife should live together and the economic conditions of their union, such as cooperation in property, mutual contributions and contributions of the respective relatives of either consort. It is invariably a public ceremony, a matter for

social concern, involving large groups of people as well as the two main actors. Its dissolution as well as its conclusion is subject to fixed traditional rules.

Nor is parenthood a mere biological relationship. Conception is the subject of a rich traditional folklore in every human community and has its legal side in the rules which discriminate between children conceived in wedlock and out of it. Pregnancy is surrounded by an atmosphere of moral values and rules. Usually the expectant mother is compelled to lead a special mode of life hedged in by tabus, all of which she has to observe on account of the welfare of the child. There is thus a culturally established, anticipatory maternity which foreshadows the biological fact. Childbirth is also an event deeply modified by ritual, legal, magical and religious concomitants, in which the emotions of the mother, her relations to the child and the relations of both to the social group are molded so as to conform to a specific traditional pattern. The father also is never passive or indifferent at childbirth. Tradition closely defines the parental duties during early pregnancy and the manner in which they are divided between husband and wife and partly shifted to more distant relatives.

Kinship, the tie between the child and its parents and their relatives, is never a haphazard affair. Its development is determined by the legal system of the community, which organizes on a definite pattern all emotional responses as well as all duties, moral attitudes and customary obligations. The important distinction between matrilineal and patrilineal relatives, the development of the wider or classificatory kinship relations as well as the formation of clans, or sibs, in which large groups of relatives are to a certain extent regarded and treated as real kindred, are cultural modifications of natural kinship. Procreation thus becomes in human societies a vast cultural scheme. The racial need of continuity is not satisfied by the mere action of physiological impulses and physiological processes but by the working of traditional rules associated with an apparatus of material culture. The procreative scheme, moreover, is seen to be composed of several component institutions: standardized courtship, marriage, parenthood, kinship and clanship. In the same way the nutritive scheme may be divided into the consuming institutions, that is, household or clubhouse with its men's refectory; the productive institutions, of tribal gardening, hunting and fishing; and the distributive institutions, such as markets and trad-

ing arrangements. Impulses act in the form of social or cultural commands, which are the re-interpretations of physiological drives in terms of social, traditionally sanctioned rules. The human being starts to court or to dig the soil, to make love or to go hunting or fishing, not because he is directly moved by an instinct but because the routine of his tribe makes him do these things. At the same time tribal routine insures that physiological needs are satisfied and that the cultural means of satisfaction conform to the same pattern with only minor variations in detail. The direct motive for human actions is couched in cultural terms and conforms to a cultural pattern. But cultural commands always bid man to satisfy his needs in a more or less direct manner, and on the whole the system of cultural commands in a given society leaves but few of the physiological needs unsatisfied.

An amalgamation of functions occurs in most human institutions. The household is not merely a reproductive institution: it is one of the main nutritive institutions and an economic, legal and often a religious unit. The family is the place where cultural continuity through education is served. This amalgamation of functions within the same institution is not fortuitous. Most of man's fundamental needs are so concatenated that their satisfaction can be best provided for within the same human group and by a combined apparatus of material culture. Even human physiology causes birth to be followed by lactation, and this is inevitably associated with the tender cares of the mother for the child, which gradually shade into the earliest educational services. The mother requires a male helpmate, and the parental group must become a cooperative as well as an educational association. The fact that marriage is an economic as well as an educational and procreative relation influences courtship deeply, and this becomes a selection for lifelong companionship, common work and common responsibilities, so that sex must be blended with other personal and cultural requirements.

Education means training in the use of implements and goods, in the knowledge of tradition, in the wielding of social power and responsibility. The parents who develop in their offspring economic attitudes, technical dexterities, moral and social duties, have also to hand over their possessions, their status or their office. The domestic relationship therefore implies a system of laws of inheritance, descent and succession.

The relation between the cultural need, an

integral social fact, on the one hand, and, on the other, the individual motives into which it becomes translated is thus clarified. The cultural need is the body of conditions which must be fulfilled if the community is to survive and its culture to continue. The individual motives, on the other hand, have nothing to do with such postulates as the continuity of race or the continuity of culture or even the need of nutrition. Few people, savage or civilized, realize that such general necessities exist. The savage is ignorant or only very vaguely conscious of the fact that mating produces children and that eating sustains the body. What is present to an individual consciousness is a culturally shaped appetite which impels people at certain seasons to look for a mate or in certain circumstances to look for wild fruit, to dig the ground or to go fishing. Sociological aims are never present in the minds of natives, and tribal legislation on a large scale could never have occurred. A theory, for instance, such as that of Frazer concerning the origins of exogamy in a deliberate act of primeval law giving is untenable. Throughout anthropological literature there is a confusion between cultural needs, which find their expression in vast schemes or aspects of social constitution, and conscious motivation, which exists as a psychological fact in the mind of an individual member of a society.

Custom, a standardized mode of behavior traditionally enjoined on the members of a community, can act or function. Courtship, for example, is really but one stage in the process of culturally defined procreation. It is the body of arrangements which allow of an adequate choice in marriage. Since the contract of marriage varies considerably from one culture to another, the consideration of sexual, legal and economic adequacy also varies, and the mechanisms by which these various elements are blended cannot be the same. However great may be the sexual liberty allowed, in no human society are young people permitted to be entirely indiscriminate or promiscuous in experimental love making. Three main types of limitation are known: the prohibition of incest, respect for previous matrimonial obligations and the rules of combined exogamy and endogamy. The prohibition of incest is with a few insignificant exceptions universal. If incest could be proved to be biologically pernicious, the function of this universal tabu would be obvious. But specialists in heredity disagree on the subject. It is possible, however, to show that from a

sociological point of view the function of incest tabus is of the greatest importance. The sexual impulse, which is in general a very upsetting and socially disruptive force, cannot enter into a previously existing sentiment without producing a revolutionary change in it. Sexual interest is therefore incompatible with any family relationship, whether parental or between brothers and sisters, for these relations are built up in the presexual period of human life and are founded on deep physiological needs of a non-sexual character. If erotic passion were allowed to invade the precincts of the home it would not merely establish jealousies and competitive elements and disorganize the family but it would also subvert the most fundamental bonds of kinship on which the further development of all social relations is based. Only one erotic relationship can be allowed within each family, and that is the relation between the husband and wife, which although it is built from the outset on erotic elements must be very finely adjusted to the other component parts of domestic co-operation. A society which allowed incest could not develop a stable family; it would therefore be deprived of the strongest foundations for kinship, and this in a primitive community would mean absence of social order.

Exogamy eliminates sex from a whole set of social relations, those between clansmen and clanswomen. Since the clan forms the typical cooperative group, the members of which are united by a number of legal, ceremonial and economic interests and activities, exogamy by dissociating the disruptive and competitive element from workaday cooperation fulfils once more an important cultural function. The general safeguarding of sexual exclusiveness in matrimony establishes that relative stability of marriage which again is inevitable if this institution is not to be undermined by the jealousies and suspicions of competitive wooing. The fact that none of the rules of incest, exogamy and adultery ever work with absolute precision and automatic force only enhances the cogency of this argument, for it is the elimination of the open working of sex which is most important. The surreptitious evasion of the rules and their occasional overriding on ceremonial occasions function as safety vents and reactions against their often irksome stringency.

Traditional rules define the season for love making, the methods of approach and wooing, even the means of attracting and pleasing. Tradition also allows of definite liberties and

even excesses, although it also sets rigorous limits to them. These limits define the degree of publicity, of promiscuity, of verbal and active indecencies; they define what is to be regarded as normal and what as perverse. In all this the real drives of human behavior in sex do not consist of natural physiological impulses but reach human consciousness in the form of commands dictated by tradition. The powerful disruptive influence of sex has to be given free play within limits. The main type of regulated liberty is the free choice of mating left to unmarried people, which has often been wrongly regarded as a survival of primitive promiscuity. To appreciate the function of prenuptial laxity it must be correlated with biological facts, with the institution of marriage and with the parental life within the household. The sexual impulse which leads people to mate is overwhelmingly more powerful than any other motive. Where marriage is the indispensable condition to sexual mating, this impulse overriding all other considerations may lead to unions which are neither spiritually nor physiologically adequate or stable. In higher cultures a moral training and a subordination of sex to wider cultural interests function as general safeguards against an exclusive dominance of the erotic element in marriage, or else culturally determined marriages arranged by parents or families assert the influence of economic and cultural factors over mere eroticism. In certain primitive communities as well as among large portions of European peasantry trial mating as a means of assessing personal compatibility and to a large extent also as the means of eliminating mere sexual urge functions as a safeguard to the institution of permanent marriage. Through prenuptial liberties in the course of courtship people cease to value the mere lure of erotic attractiveness and, on the other hand, they become more and more influenced by personal affinities, if there is no physiological incompatibility. The function then of prenuptial liberty is that it influences the matrimonial choice, which becomes deliberate, based on experience and directed by wider and more synthetic considerations than the blind impulse of sex. Prenuptial unchastity therefore functions as a mode of preparation for marriage in eliminating the crude, non-empirical, untutored sex impulse and in welding this impulse with others into a deeper appreciation of personality.

The *couvade*, the symbolic ritual by which a man imitates childbed while his wife goes about

her work, is also not a survival but can be explained functionally in its cultural context.

In the ideas, customs and social arrangements which refer to conception, pregnancy and childbirth the fact of maternity is culturally determined over and above its biological nature. Paternity is established in a symmetrical way by rules in which the father has partly to imitate the tabus, observances and rules of conduct traditionally imposed on the mother and has also to take over certain associated functions. The behavior of the father at childbirth is strictly defined, and everywhere, whether he be excluded from the mother's company or forced to assist, whether he be regarded as dangerous or indispensable to the welfare of the mother and child, the father has to assume a definite, strictly prescribed role. Later the father shares a great many of the mother's duties; he follows and replaces her in a great many of the tender cares bestowed on the infant. The function of *couvade* is the establishment of social paternity by the symbolic assimilation of the father to the mother. Far from being a dead or useless survival or trait *couvade* is merely one of the creative ritual acts at the basis of the institution of the family. Its nature can be understood not by isolating it, not by emphasizing its strangeness and tearing it out of its natural setting, but, on the contrary, only by placing it within the institutions to which it belongs, by comprehending it as an integral part of the institution of the family.

Classificatory terminologies are conceived as having at one time embodied some "intelligent plan" (as Morgan put it) for the classification of relatives. In Morgan's theory this classification was supposed to have given with an almost mathematical precision the limits of potential paternity. According to more recent theories, notably that of Rivers, classificatory terminologies were once the clear and real expression of anomalous marriages. Whatever the concrete turn of the various theories the fact of classificatory terminologies has been the source of a flood of speculations about the sequence of stages in the evolution of marriage, about anomalous unions, about primitive gerontocracy and promiscuity, about the clan or some other communal procreative scheme taking at one stage or another the place of the family. Few, however, seriously inquired into the present day function of classificatory terms. McLennan suggested that they might be a mere polite mode of address, and in this he was followed by a few

writers. But since these nomenclatures are very rigidly adhered to and since, as Rivers has shown, they are associated with definite social status, McLennan's explanation has had to be discarded.

Classificatory terminologies, however, fulfil a very important and a very specific function, which can only be appreciated on the basis of a careful study of how the terms develop meaning during the life history of the tribesman. The first meaning acquired by the child is always individual. It is based on personal relations to the father and mother, to brothers and sisters. A full outfit of family terms with well determined individual meaning is always acquired before any further linguistic developments. But then a series of extensions of meaning takes place. The words mother and father come to be applied first to the mother's sister and father's brother respectively, but they are applied to these people in a frankly metaphorical manner; that is, with an extended and different meaning which in no way interferes with or obliterates the original meaning when this is applied to the original parents. The extension takes place because the nearest of kin are in a primitive society under an obligation to act as substitute parents, to replace the child's progenitors in case of death or failure and in all cases to share their duties to a considerable extent. Unless and until complete adoption takes place the substitute parents do not replace the original ones, and in no case are the two sets lumped or identified. They are merely partially assimilated. The naming of people is always a semilegal act, especially in primitive communities. As in ceremonies of adoption there is the imitation of an actual birth, as in the *couvade* there is simulated childbed, as in the act of blood brotherhood there are such fictions as exchange of blood, as in marriage a symbolic binding, tying, joining or act of common eating and common public appearance often takes place—so here a partially established, derived relationship is characterized by the act of verbal imitation in naming. The function of classificatory verbal usage is then the establishment of legal claims of vicarious parenthood by the binding metaphor of extension in kinship terms. The discovery of the function of classificatory terminology opens a set of new problems: the study of the initial situation of kinship, of the extensions of kinship meaning, of the partial taking over of kinship duties and of the changes produced in previous relationships by such extensions. These are empirical problems

leading not to more speculation but to a fuller study of facts in the field. At the same time, the discovery of a function of the use of classificatory terminology in terms of present day sociological reality cuts the ground from under the whole series of speculations by which savage nomenclatures have been explained as survivals of past stages of human marriage.

The apparatus of domesticity influences the moral or spiritual aspect of family life. Its material substratum consists of the dwellings, the internal arrangements, the cooking apparatus and the domestic implements and also of the mode of settlement; that is, of the manner in which the dwellings are distributed over the territory. This material substratum enters most subtly into the texture of family life and influences deeply its legal, economic and moral aspects. The constitution of a household characteristic of a culture becomes deeply associated with the material side of the interior of the dwelling, whether it be a skyscraper or a wind screen, a sumptuous apartment or a hovel. There is an infinite range of intimate personal associations with it from infancy and childhood, through the time of puberty and emotional awakening, into the stage of courtship and early married life, until old age. The sentimental and romantic implications of these facts are acknowledged in contemporary culture, in the preserving and cultivating of the birthplaces and homes of famous men. But although a great deal is known about the technology of house building and even about the structure of houses in various cultures and although a fair amount is also known about the constitution of the family, few accounts deal with the relation between the form of the dwelling and the form of domestic arrangements, on the one hand, and the constitution of the family, on the other, and yet such a relation does exist. The isolated homestead distant from all others makes for a strongly knit, self-contained, economically as well as morally independent family. Self-contained houses collected into village communities allow of a much closer texture in derived kinship and greater extent of local cooperation. Houses compounded into joint households, especially when they are united under one owner, are the necessary basis of a joint family or *Grossfamilie*. Large communal houses where only a separate hearth or partition distinguishes the various component families make for a yet more closely knit system of kinship. Finally, the existence of special club-houses, where the men, the bachelors or the un-

married girls of a community sleep, eat or cook together, is obviously correlated to the general structure of a community when kinship is complicated by age grades, secret societies and other male or female associations and is usually also correlated to the presence or absence of sexual laxity.

The further the correlation between sociology and the form of settlement and dwelling is followed, the better either side is understood. While on the one hand the form of material arrangements receives its only significance from its sociological context, on the other hand the whole objective determination of social and moral phenomena can best be defined and described in terms of the material substratum as it molds and influences the social and spiritual life of a culture. The arrangements within the house also show the need of a parallel study and correlation of the material and spiritual. The meager furniture, the hearth, the sleeping bunks, the mats and pegs of a native hut, show a simplicity, even poverty, of form, which, however, becomes immensely significant through the depth and the range of sociological and spiritual association. The hearth, for instance, varies but little in form: a few indications as to how the stones are placed, how the smoke is carried off, how supports for cooking are arranged, how the fire is used for warming and for lighting the interior, are sufficient from the mere technical side. But even in stating these simple details one is led into the study of typical uses of fire, into the indication of human attitudes and emotions; in short, into the analysis of the social and moral customs which form round the hearth. For the hearth is the center of domestic life; and the manner in which it is used, the customs of kindling, keeping and extinguishing, the domestic cult which often develops round it, the mythology and the symbolic significance of the hearth, are indispensable data for the study of domesticity and of its place in culture. In the Trobriand Islands, for instance, the hearth has to be placed in the center, lest sorcery, which is mainly effective through the medium of smoke, should be carried in from outside. The hearth is the special property of women. Cooking is to a certain extent tabu to men and its proximity pollutes uncooked vegetable food. Hence there is a division between storehouses and cooking houses in the villages. All this makes the simple material arrangements of a house a social, moral, legal and religious reality.

The disposition of sleeping bunks is likewise

correlated with the sexual and parental side of married life, with incest tabus and the need for unmarried peoples' houses; the access to a house is correlated with the seclusion of family life, with property and sexual morality. Everywhere form becomes more and more significant the better the relation of sociological realities and their material substratum is understood. Ideas, customs and laws codify and determine material arrangements, while these latter are the main apparatus for molding every new generation into the typical traditional pattern of its society.

The primary biological needs of a community, that is, the conditions under which a culture can thrive, develop and continue, are satisfied in an indirect manner which imposes secondary or derived conditions. These may be designated as the instrumental imperatives of culture. The whole body of material culture must be produced, maintained, distributed and used. In every culture therefore a system of traditional rules or commands is found which defines the activities, usages and values by which food is produced, stored and apportioned, goods manufactured, owned and used, tools prepared and embodied in production. An economic organization is indispensable to every community, and culture must always keep in touch with its material substratum.

Regulated cooperation exists even in such simple activities as the search for food among the lowest primitives. They at times have to apportion big tribal gatherings, and this requires a complicated system of commissariat. Within the family there is a division of labor, and the cooperation of families within the local community is never a simple economic matter. The maintenance of the utilitarian principle in production is closely related to artistic, magical, religious and ceremonial activities. Primitive property in land, in personal possession and in the various means of production is far more complex than older anthropology assumed, and the study of primitive economics is developing a considerable interest in what might be called the early forms of civil law.

Cooperation means sacrifice, effort, subordination of private interests and inclinations to the joint ends of the community, the existence of social constraint. Life in common offers various temptations, especially to the impulses of sex, and as a result a system of prohibitions and restraints as well as of mandatory rules is unavoidable. Economic production provides man with things desirable and valuable, not un-

restrictedly accessible for use and enjoyment to everybody alike, and rules of property, of possession and use are developed and enforced. Special organization entails differences in rank, leadership, status and influence. Hierarchy develops social ambitions and requires safeguards, which are effectively sanctioned. This whole set of problems has been signally neglected because law and its sanctions are in primitive communities very rarely embodied in special institutions. Legislation, legal sanctions and effective administration of tribal rules are very often carried out as by-products of other activities. The maintenance of law is usually one of the secondary or derived functions of such institutions as the family, the household, the local community and the tribal organization. But although not laid down in a specific body of codified rules nor yet carried out by specially organized groups of people the sanctions of primitive law function none the less in a special manner and develop special features in the institutions to which they belong. For it is essentially incorrect to maintain, as has often been done, that primitive law works automatically and that the savage is naturally a law abiding citizen. Rules of conduct must be drilled into each new generation through education; that is, provision must be made for the continuity of culture through the instrumentality of tradition. The first requisite is the existence of symbolic signs in which condensed experience can be handed over from one generation to another. Language is the most important type of such symbolic signs. Language does not contain experience; it is rather a system of sound habits which accompanies the development of cultural experience in every human community and becomes an integral part of this cultural experience. In primitive cultures tradition remains oral. The speech of a primitive tribe is full of set sayings, maxims, rules and reflections, which in a stereotyped manner carry on the wisdom of one generation into another. Folk tales and mythology form another department of verbal tradition. In higher cultures writing is added to carry on spoken tradition. The failure to realize that language is an integral part of culture has led to the vague, metaphorical and misleading parallels between animal societies and human culture which have done much harm to sociology. If it were clearly realized that culture without language does not exist, the treatment of animal communities would cease to be a part of sociology and animal adaptations to nature would be clearly dis-

tinguished from culture. Education in primitive society seldom commands specific institutions. The family, the group of extended kindred, the local community, age grades, secret societies, initiation camps, the professional groups or guilds of technical, magical or religious craft—these are the institutions which correspond in some of their derived functions to schools in more advanced cultures.

The three instrumental imperatives, economic organization, law and education, do not exhaust all that culture entails in its indirect satisfaction of human needs. Magic and religion, knowledge and art, are part of the universal scheme which underlies all concrete cultures and may be said to arise in response to an integrative or synthetic imperative of human culture.

In spite of the various theories about a specific non-empirical and prelogical character of primitive mentality there can be no doubt that as soon as man developed the mastery of environment by the use of implements, and as soon as language came into being, there must also have existed primitive knowledge of an essentially scientific character. No culture could survive if its arts and crafts, its weapons and economic pursuits were based on mystical, non-empirical conceptions and doctrines. When human culture is approached from the pragmatic, technological side, it is found that primitive man is capable of exact observation, of sound generalizations and of logical reasoning in all those matters which affect his normal activities and are at the basis of his production. Knowledge is then an absolute derived necessity of culture. It is more, however, than a means to an end, and it was not classed therefore with the instrumental imperatives. Its place in culture, its function, is slightly different from that of production, of law or of education. Systems of knowledge serve to connect various types of behavior; they carry over the results of past experiences into future enterprise and they bring together elements of human experience and allow man to coordinate and integrate his activities. Knowledge is a mental attitude, a diathesis of the nervous system, which allows man to carry on the work which culture makes him do. Its function is to organize and integrate the indispensable activities of culture.

The material embodiment of knowledge consists in the body of arts and crafts, of technical processes and rules of craftsmanship. More specifically, in most primitive cultures and certainly in higher ones there are special imple-

ments of knowledge—diagrams, topographical models, measures, aids to orientation or to counting.

The connection between native thought and language opens important problems of function. Linguistic abstraction, categories of space, time and relationship and logical means of expressing the concatenation of ideas are extremely important matters, and the study of how thought works through language in any culture is still a virgin field of cultural linguistics. How primitive language works, where it is embodied, how it is related to social organization, to primitive religion and magic, are important problems of functional anthropology.

By the very forethought and foresight which it gives, the integrative function of knowledge creates new needs, that is, imposes new imperatives. Knowledge gives man the possibility of planning ahead, of embracing vast spaces of time and distance; it allows a wide range to his hopes and desires. But however much knowledge and science help man in allowing him to obtain what he wants they are unable completely to control chance, to eliminate accidents, to foresee the unexpected turn of natural events or to make human handiwork reliable and adequate to all practical requirements. In this field, much more practical, definite and circumscribed than that of religion, there develops a special type of ritual activities which anthropology labels collectively as magic.

The most hazardous of all human enterprises known to primitive man is sailing. In the preparation of his sailing craft and the laying out of his plans the savage turns to his science. The painstaking work as well as the intelligently organized labor in construction and in navigation bears witness to the savage's trust in science and submission to it. But adverse wind or no wind at all, rough weather, currents and reefs are always liable to upset his best plans and most careful preparations. He must admit that neither his knowledge nor his most painstaking efforts are a guaranty of success. Something unaccountable usually enters and baffles his anticipations. But although unaccountable it yet appears to have a deep meaning, to act or behave with a purpose. The sequence, the significant concatenation of events, seems to contain some inner logical consistency. Man feels that he can do something to wrestle with that mysterious element or force, to help and abet his luck. There are therefore always systems of superstition, of more or less developed ritual, associated with sailing, and in

primitive communities the magic of sailing craft is highly developed. Those who are well acquainted with some good magic have, in virtue of that, courage and confidence. When the canoes are used for fishing, the accidents and the good or bad luck may refer not only to transport but also to the appearance of fish and to the conditions under which they are caught. In trading, whether overseas or with near neighbors, chance may favor or thwart the ends and desires of man. As a result both fishing and trading magic are very well developed.

Likewise in war man, however primitive, knows that well made weapons of attack and defense, strategy, the force of numbers and the strength of the individuals insure victory. Yet with all this the unforeseen and accidental help even the weaker to victory when the fray happens under the cover of night, when ambushes are possible, when the conditions of the encounter obviously favor one side at the expense of the other. Magic is used as something which over and above man's equipment and his force helps him to master accident and to ensnare luck. In love also a mysterious, unaccountable quality of success or else a predestination to failure seems to be accompanied by some force independent of ostensible attraction and of the best laid plans and arrangements. Magic enters to insure something which counts over and above the visible and accountable qualifications.

Primitive man depends on his economic pursuits for his welfare in a manner which makes him realize bad luck very painfully and directly. Among people who rely on their fields or gardens what might be called agricultural knowledge is invariably well developed. The natives know the properties of the soil, the need of a thorough clearing from bush and weed, fertilizing with ashes and appropriate planting. But however well chosen the site and well worked the gardens, mishaps occur. Drought or deluge coming at most inappropriate seasons destroys the crops altogether, or some blights, insects or wild animals diminish them. Or some other year, when man is conscious that he deserves but a poor crop, everything runs so smoothly and prosperously that an unexpectedly good return rewards the undeserving gardener. The dreaded elements of rain and sunshine, pests and fertility seem to be controlled by a force which is beyond ordinary human experience and knowledge, and man repairs once more to magic.

In all these examples the same factors are in-

involved. Experience and logic teach man that within definite limits knowledge is supreme; but beyond them nothing can be done by rationally founded practical exertions. Yet he rebels against inaction because although he realizes his impotence he is yet driven to action by intense desire and strong emotions. Nor is inaction at all possible. Once he has embarked on a distant voyage or finds himself in the middle of a fray or halfway through the cycle of garden growing, the native tries to make his frail canoe more seaworthy by charms or to drive away locusts and wild animals by ritual or to vanquish his enemies by dancing.

Magic changes its forms; it shifts its ground; but it exists everywhere. In modern societies magic is associated with the third cigarette lit by the same match, with spilled salt and the need of throwing it over the left shoulder, with broken mirrors, with passing under a ladder, with the new moon seen through glass or on the left hand, with the number thirteen or with Friday. These are minor superstitions which seem merely to vegetate among the intelligentsia of the western world. But these superstitions and much more developed systems also persist tenaciously and are given serious consideration among modern urban populations. Black magic is practised in the slums of London by the classical method of destroying the picture of the enemy. At marriage ceremonies good luck for the married couple is obtained by the strictest observance of several magical methods such as the throwing of the slipper and the spilling of rice. Among the peasants of central and eastern Europe elaborate magic still flourishes and children are treated by witches and warlocks. People are thought to have the power to prevent cows from giving milk, to induce cattle to multiply unduly, to produce rain and sunshine and to make people love or hate each other. The saints of the Roman Catholic church become in popular practise passive accomplices of magic. They are beaten, cajoled and carried about. They can give rain by being placed in the fields, stop flows of lava by confronting them and stop the progress of a disease, of a blight or of a plague of insects. The crude practical use made of certain religious rituals or objects makes their function magical. For magic is distinguished from religion in that the latter creates values and attains ends directly, whereas magic consists of acts which have a practical utilitarian value and are effective only as a means to an end. Thus a strictly utilitarian subject matter or issue of an act and its direct, instru-

mental function make it magic, and most modern established religions harbor within their ritual and even their ethics a good deal which really belongs to magic. But modern magic not only survives in the forms of minor superstitions or within the body of religious systems. Wherever there is danger, uncertainty, great incidence of chance and accident, even in entirely modern forms of enterprise, magic crops up. The gambler at Monte Carlo, on the turf or in a continental state lottery develops systems. Motor-ing and modern sailing demand mascots and develop superstitions. Around every sensational sea tragedy there has formed a myth showing some mysterious magical indications or giving magical reasons for the catastrophe. Aviation is developing its superstitions and magic. Many pilots refuse to take up a passenger who is wearing anything green, to start a journey on a Friday or to light three cigarettes with a match when in the air, and their sensitiveness to superstition seems to increase with altitude. In all large cities of Europe and America magic can be purchased from palmists, clairvoyants and other soothsayers who forecast the future, give practical advice as to lucky conduct and retail ritual apparatus such as amulets, mascots and talismans. The richest domain of magic, however, is, in civilization as in savagery, that of health. Here again the old venerable religions lend themselves readily to magic. Roman Catholicism opens its sacred shrines and places of worship to the ailing pilgrim, and faith healing flourishes also in other churches. The main function of Christian Science is the thinking away of illness and decay; its metaphysics are very strongly pragmatic and utilitarian and its ritual is essentially a means to the end of health and happiness. The unlimited range of universal remedies and blessings, osteopathy and chiropractic, dietetics and curing by sun, cold water, grape or lemon juice, raw food, starvation, alcohol or its prohibition—one and all shade invariably into magic. Intellectuals still submit to Coué and Freud, to Jaeger and Kneipp, to sun worship, either direct or through the mercury vapor lamp—not to mention the bedside manner of the highly paid specialist. It is very difficult to discover where common sense ends and where magic begins.

The savage is not more rational than modern man nor is he more superstitious. He is more limited, less liable to free imaginings and to the confidence trick of new inventions. His magic is traditional and he has his stronghold of knowledge, his empirical and rational tradition of

science. Since the superstitious or prelogical character of primitive man has been so much emphasized, it is necessary to draw clearly the dividing line between primitive science and magic. There are domains on which magic never encroaches. The making of fire, basketry, the actual production of stone implements, the making of strings or mats, cooking and all minor domestic activities although extremely important are never associated with magic. Some of them become the center of religious practises and of mythology, as, for example, fire or cooking or stone implements; but magic is never connected with their production. The reason is that ordinary skill guided by sound knowledge is sufficient to set man on the right path and to give him certainty of correct and complete control of these activities.

In some pursuits magic is used under certain conditions and is absent under others. In a maritime community depending on the products of the sea there is never magic connected with the collecting of shellfish or with fishing by poison, weirs and fish traps, so long as these are completely reliable. On the other hand, any dangerous, hazardous and uncertain type of fishing is surrounded by ritual. In hunting the simple and reliable ways of trapping or killing are controlled by knowledge and skill alone; but let there be any danger or any uncertainty connected with an important supply of game and magic immediately appears. Coastal sailing as long as it is perfectly safe and easy commands no magic. Overseas expeditions are invariably bound up with ceremonies and ritual. Man resorts to magic only where chance and circumstances are not fully controlled by knowledge.

This is best seen in what might be called systems of magic. Magic may be but loosely and capriciously connected with its practical setting. One hunter may use certain formulae and rites, and another ignore them; or the same man may apply his conjurings on one occasion and not on another. But there are forms of enterprise in which magic must be used. In a big tribal adventure, such as war, or a hazardous sailing expedition or seasonal travel or an undertaking such as a big hunt or a perilous fishing expedition or the normal round of gardening, which as a rule is vital to the whole community, magic is often obligatory. It runs in a fixed sequence concatenated with the practical events, and the two orders, magical and practical, depend on one another and form a system. Such systems of magic appear at first sight an inextricable mix-

ture of efficient work and superstitious practises and so seem to provide an unanswerable argument in favor of the theories that magic and science are under primitive conditions so fused as not to be separable. Fuller analysis, however, shows that magic and practical work are entirely independent and never fuse.

But magic is never used to replace work. In gardening the digging or the clearing of the ground or the strength of the fences or quality of the supports is never scamped because stronger magic has been used over them. The native knows well that mechanical construction must be produced by human labor according to strict rules of craft. He knows that all the processes which have been in the soil can be controlled by human effort to a certain extent but not beyond, and it is only this beyond which he tries to influence by magic. For his experience and his reason tell him that in certain matters his efforts and his intelligence are of no avail whatever. On the other hand, magic has been known to help; so at least his tradition tells him.

In the magic of war and of love, of trading expeditions and of fishing, of sailing and of canoe making, the rules of experience and logic are likewise strictly adhered to as regards technique, and knowledge and technique receive due credit in all the good results which can be attributed to them. It is only the unaccountable results, which an outside observer would attribute to luck, to the knack of doing things successfully, to chance or to fortune, that the savage attempts to control by magic.

Magic therefore, far from being primitive science, is the outgrowth of clear recognition that science has its limits and that a human mind and human skill are at times impotent. For all its appearances of megalomania, for all that it seems to be the declaration of the "omnipotence of thought," as it has recently been defined by Freud, magic has greater affinity with an emotional outburst, with daydreaming, with strong, unrealizable desire.

To affirm with Frazer that magic is a pseudo-science would be to recognize that magic is not really primitive science. It would imply that magic has an affinity with science or at least that it is the raw material out of which science develops—implications which are untenable. The ritual of magic shows certain striking characteristics which have made it quite plausible for most writers from Grimm and Tylor to Freud and Lévy-Bruhl to affirm that magic takes the place of primitive science.

Magic unquestionably is dominated by the sympathetic principle: like produces like; the whole is affected if the sorcerer acts on a part of it; occult influences can be imparted by contagion. If one concentrates on the form of the ritual only he can legitimately conclude with Frazer that the analogy between the magical and the scientific conceptions of the world is close and that the various cases of sympathetic magic are mistaken applications of one or the other of two great fundamental laws of thought, namely, the association of ideas by similarity and the association of ideas by contiguity in space or time.

But a study of the function of science and the function of magic casts a doubt on the sufficiency of these conclusions. Sympathy is not the basis of pragmatic science, even under the most primitive conditions. The savage knows scientifically that a small pointed stick of hard wood rubbed or drilled against a piece of soft, brittle wood, provided they are both dry, gives fire. He also knows that strong, energetic, increasingly swift motion has to be employed, that tinder must be produced in the action, the wind kept off and the spark fanned immediately into a glow and this into a flame. There is no sympathy, no similarity, no taking the part instead of the legitimate whole, no contagion. The only association or connection is the empirical, correctly observed and correctly framed concatenation of natural events. The savage knows that a strong bow well handled releases a swift arrow, that a broad beam makes for stability and a light, well shaped hull for swiftness in his canoe. There is here no association of ideas by similarity or contagion or *pars pro toto*. The native puts a yam or a banana sprout into an appropriate piece of ground. He waters or irrigates it unless it be well drenched by rain. He weeds the ground round it, and he knows quite well that barring unexpected calamities the plant will grow. Again there is no principle akin to that of sympathy contained in this activity. He creates conditions which are perfectly scientific and rational and lets nature do its work. Therefore in so far as magic consists in the enactment of sympathy, in so far as it is governed by an association of ideas, it radically differs from science; and on analysis the similarity of form between magic and science is revealed as merely apparent, not real.

The sympathetic rite although a very prominent element in magic functions always in the context of other elements. Its main purpose always consists in the generation and transference

of magical force and accordingly it is performed in the atmosphere of the supernatural. As Hubert and Mauss have shown, acts of magic are always set apart, regarded as different, conceived and carried out under distinct conditions. The time when magic is performed is often determined by tradition rather than by the sympathetic principle, and the place where it is performed is only partly determined by sympathy or contagion and more by supernatural and mythological associations. Many of the substances used in magic are largely sympathetic but they are often used primarily for the physiological and emotional reaction which they elicit in man. The dramatic emotional elements in ritual enactment incorporate, in magic, factors which go far beyond sympathy or any scientific or pseudo-scientific principle. Mythology and tradition are everywhere embedded, especially in the performance of the magical spell, which must be repeated with absolute faithfulness to the traditional original and during which mythological events are recounted in which the power of the prototype is invoked. The supernatural character of magic is also expressed in the abnormal character of the magician and by the temporary tabus which surround its execution.

In brief, there exists a sympathetic principle: the ritual of magic contains usually some reference to the results to be achieved; it foreshadows them, anticipates the desired events. The magician is haunted by imagery, by symbolism, by associations of the result to follow. But he is quite as definitely haunted by the emotional obsession of the situation which has forced him to resort to magic. These facts do not fit into the simple scheme of sympathy conceived as misapplication of crude observations and half logical deductions. The various apparently disjointed elements of magical ritual—the dramatic features, the emotional side, the mythological allusions and the anticipation of the end—make it impossible to consider magic a sober scientific practise based on an empirical theory. Nor can magic be guided by experience and at the same time be constantly harking back to myth.

The fixed time, the determined spot, the preliminary isolating conditions of magic, the tabus to be observed by the performer, as well as his physiological and sociological nature, place the magical act in an atmosphere of the supernatural. Within this context of the supernatural the rite consists, functionally speaking, in the production of a specific virtue or force and of the

launching, directing or impelling of this force to the desired object. The production of magical force takes place by spell, manual and bodily gesticulation and the proper condition of the officiating magician. All these elements exhibit a tendency to a formal assimilation toward the desired end or toward the ordinary means of producing this end. This formal resemblance is probably best defined in the statement that the whole ritual is dominated by the emotions of hate, fear, anger or erotic passion or by the desire to obtain a definite practical end.

The magical force or virtue is not conceived as a natural force. Hence the theories propounded by Preuss, Marett, Hubert and Mauss, which would make the Melanesian *mana* or the similar North American concepts the clue to the understanding of all magic, are not satisfactory. The *mana* concept embraces personal power, natural force, excellence and efficiency alongside the specific virtue of magic. It is a force regarded as absolutely *sui generis*, different either from natural forces or from the normal faculties of man.

The force of magic can be produced only and exclusively within traditionally prescribed rites. It can be received and learned only by due initiation into the craft and by the taking over of the rigidly defined system of conditions, acts and observances. Even when magic is discovered or invented it is invariably conceived as true revelation from the supernatural. Magic is an intrinsic, specific quality of a situation and of an object or phenomenon within the situation, consisting in the object being amenable to human control by means which are specifically and uniquely connected with the object and which can be handled only by appropriate people. Magic therefore is always conceived as something which does not reside in nature, that is, outside man, but in the relation between man and nature. Only those objects and forces in nature which are very important to man, on which he depends and which he cannot yet normally control elicit magic.

A functional explanation of magic may be stated in terms of individual psychology and of the cultural and social value of magic. Magic is to be expected and generally to be found whenever man comes to an unbridgeable gap, a hiatus in his knowledge or in his powers of practical control, and yet has to continue in his pursuit. Forsaken by his knowledge, baffled by the results of his experience, unable to apply any effective technical skill, he realizes his impo-

tence. Yet his desire grips him only the more strongly. His fears and hopes, his general anxiety, produce a state of unstable equilibrium in his organism, by which he is driven to some sort of vicarious activity. In the natural human reaction to frustrated hate and impotent anger is found the *materia prima* of black magic. Unrequited love provokes spontaneous acts of prototype magic. Fear moves every human being to aimless but compulsory acts; in the presence of an ordeal one always has recourse to obsessive daydreaming.

The natural flow of ideas under the influence of emotions and desires thwarted in their full practical satisfaction leads one inevitably to the anticipation of the positive results. But the experience upon which this anticipatory or sympathetic attitude rests is not the ordinary experience of science. It is much more akin to daydreaming, to what the psychoanalysts call wish fulfilment. When the emotional state reaches the breaking point at which man loses control over himself, the words which he utters, the gestures to which he gives way and the physiological processes within his organism which accompany all this allow the pent up tension to flow over. Over all such outbursts of emotion, over such acts of prototype magic, there presides the obsessive image of the desired end. The substitute action in which the physiological crisis finds its expression has a subjective value: the desired end seems nearer satisfaction.

Standardized, traditional magic is nothing else but an institution which fixes, organizes and imposes upon the members of a society the positive solution in those inevitable conflicts which arise out of human impotence in dealing with all hazardous issues by mere knowledge and technical ability. The spontaneous, natural reaction of man to such situations supplies the raw material of magic. This raw material implies the sympathetic principle in that man has to dwell both on the desired end and on the best means of obtaining it. The expression of emotions in verbal utterances, in gestures, in an almost mystical belief that such words and gestures have a power, crops up naturally as a normal, physiological reaction. The elements which do not exist in the *materia prima* of magic but are to be found in the developed systems are the traditional, mythological elements. Human culture everywhere integrates a raw material of human interests and pursuits into standardized, traditional customs. In all human tradition a definite choice is made from within a variety of possi-

bilities. In magic also the raw material supplies a number of possible ways of behavior. Tradition chooses from among them, fixes a special type and endues it with a hallmark of social value.

Tradition also reinforces the belief in magical efficacy by the context of special experience. Magic is so deeply believed in because its pragmatic truth is vouched for by its psychological or even physiological efficacy, since in its form and in its ideology and structure magic corresponds to the natural processes of the human organism. The conviction which is implied in these processes extends obviously to standardized magic. This conviction is useful because it raises the efficiency of the person who submits to it. Magic possesses therefore a functional truth or a pragmatic truth, since it arises always under conditions where the human organism is disintegrated. Magic corresponds to a real physiological need.

The seal of social approval given to the standardized reactions, selected traditionally out of the raw material of magic, gives it an additional backing. The general conviction that this and only this rite, spell or personal preparation enables the magician to control chance makes every individual believe in it through the ordinary mechanism of molding or conditioning. The public enactment of certain ceremonies, on the one hand, and the secrecy and esoteric atmosphere in which others are shrouded add again to their credibility. The fact also that magic usually is associated with intelligence and strong personality raises its credit in the eyes of any community. Thus a conviction that man can control by a special, traditional, standardized handling the forces of nature and human beings is not merely subjectively true through its physiological foundations, not merely pragmatically true in that it contributes to the reintegration of the individual, but it carries an additional evidence due to its sociological function.

Magic serves not only as an integrative force to the individual but also as an organizing force to society. The fact that the magician by the nature of his secret and esoteric lore has also the control of the associated practical activities causes him usually to be a person of the greatest importance in the community. The discovery of this was one of the great contributions of Frazer to anthropology. Magic, however, is of social importance not only because it gives power and thus raises a man to a high position. It is a real organizing force. In Australia the constitution of the tribe, of the clan, of the local group, is based

on a system of totemic ideas. The main ceremonial expression of this system consists in the rites of magical multiplication of plants and animals and in the ceremonies of initiation into manhood. Both of these rites underlie the tribal framework and they are both the expression of a magical order of ideas based on totemic mythology. The leaders who arrange the tribal meetings, who conduct them, who direct the initiation and are the protagonists in dramatic representations of myth and in the public magical ceremonies, play this part because of their traditional magical filiation. The totemic magic of these tribes is their main organizing system.

To a large extent this is also true of the Papuan tribes of New Guinea, of the Melanesians and of the people of the Indonesian archipelagoes, where magical rites and ideas definitely supply the organizing principle in practical activities. The secret societies of the Bismarck Archipelago and west Africa, the rain makers of the Sudan, the medicine men of the North American Indians—all combine magical power with political and economic influence. Sufficient details to assess the extent and the mechanism by which magic enters and controls secular and ordinary life are often lacking. But among the Masai or Nandi in east Africa the evidence reveals that the military organization of the tribe is associated with war magic and that the guidance in political affairs and general tribal concerns depends on rain magic. In New Guinea garden magic, overseas trading expeditions, fishing and hunting on a big scale show that the ceremonial significance of magic supplies the moral and legal framework by which all practical activities are held together.

Sorcery in its major forms is usually specialized and institutionalized; that is, either the sorcerer is a professional whose services can be bought or commanded or sorcery is vested in a secret society or special organization. In all cases sorcery is either in the same hands as political power, prestige and wealth or else it can be purchased or demanded by those who can afford to do so. Sorcery thus is invariably a conservative force used at times for intimidation but usually for the enforcement of customary law or of the wishes of those in power. It is always a safeguard for the vested interests, for the organized, established privileges. The sorcerer who has behind him the chief or a powerful secret society can make his art felt more poignantly than if he were working against them or on his own.

The individual and sociological function of magic is thus made more efficient by the very mechanisms through which it works. In this and in the subjective aspect of the calculus of probability, which makes success overshadow failure, while failure again can be explained by counter-magic, it is clear that the belief is not so ill founded nor due to such extravagant superstitiousness of the primitive mind as might at first appear. A strong belief in magic finds its public expression in the running mythology of magical miracles which is always found in company with all important types of magic. The competitive boasting of one community against another, the fame of outstanding magical success, the conviction that extraordinary good luck has probably been due to magic, create an ever nascent tradition which always surrounds famous magicians or famous systems of magic with a halo of supernatural reputation. This running tradition usually culminates retrospectively in a primeval myth, which gives the charter and credentials to the whole magical system. Myth of magic is definitely a warrant of its truth, a pedigree of its filiation, a charter of its claims to validity.

This is true not only of magical mythology. Myth in general is not an idle speculation about the origins of things or institutions. Nor is it the outcome of the contemplation of nature and rhapsodical interpretation of its laws. The function of myth is neither explanatory nor symbolic. It is the statement of an extraordinary event, the occurrence of which once for all had established the social order of a tribe or some of its economic pursuits, its arts and crafts or its religious or magical beliefs and ceremonies. Myth is not simply a piece of attractive fiction which is kept alive by the literary interest in the story. It is a statement of primeval reality which lives in the institutions and pursuits of a community. It justifies by precedent the existing order and it supplies a retrospective pattern of moral values, of sociological discriminations and burdens and of magical belief. In this consists its main cultural function. For all its similarity of form myth is neither a mere tale or prototype of literature or of science nor a branch of art or history nor an explanatory pseudo-theory. It fulfils a function *sui generis* closely connected with the nature of tradition and belief, with the continuity of culture, with the relation between age and youth and with the human attitude toward the past. The function of myth is to strengthen tradition and to endow it with a

greater value and prestige by tracing it back to a higher, better, more supernatural and more effective reality of initial events.

The place of religion must be considered in the scheme of culture as a complex satisfaction of highly derived needs. The various theories of religion ascribe it to either a religious "instinct" or a specific religious sense (McDougall, Hauer) or else explain it as a primitive theory of animism (Tylor) or pre-animism (Marett) or ascribe it to the emotions of fear (Wundt) or to aesthetic raptures and lapses of speech (Max Müller) or the self-revelation of society (Durkheim). These theories make religion something superimposed on the whole structure of human culture, satisfying some needs perhaps, but needs which are entirely autonomous and have nothing to do with the hard worked reality of human existence. Religion, however, can be shown to be intrinsically although indirectly connected with man's fundamental, that is, biological, needs. Like magic it comes from the curse of forethought and imagination, which fall on man once he rises above brute animal nature. Here there enter even wider issues of personal and social integration than those arising out of the practical necessity of hazardous action and dangerous enterprise. A whole range of anxieties, forebodings and problems concerning human destinies and man's place in the universe opens up once man begins to act in common not only with his fellow citizens but also with the past and future generations. Religion is not born out of speculation or reflection, still less out of illusion or misapprehension, but rather out of the real tragedies of human life, out of the conflict between human plans and realities.

Culture entails deep changes in man's personality; among other things it makes man surrender some of his self-love and self-seeking. For human relations do not rest merely or even mainly on constraint coming from without. Men can only work with and for one another by the moral forces which grow out of personal attachments and loyalties. These are primarily formed in the processes of parenthood and kinship but become inevitably widened and enriched. The love of parents for children and of children for their parents, that between husband and wife and between brothers and sisters, serve as prototypes and also as a nucleus for the loyalties of clanship, of neighborly feeling and of tribal citizenship. Cooperation and mutual assistance are based, in savage and civilized societies, on permanent sentiments.

The existence of strong personal attachments and the fact of death, which of all human events is the most upsetting and disorganizing to man's calculations, are perhaps the main sources of religious belief. The affirmation that death is not real, that man has a soul and that this is immortal arises out of a deep need to deny personal destruction, a need which is not a psychological instinct but is determined by culture, by cooperation and by the growth of human sentiments. To the individual who faces death the belief in immortality and the ritual of extreme unction, or last comforts (which in one form or another is almost universal), confirm his hope that there is a hereafter, that it is perhaps not worse than the present life and may be better. Thus the ritual before death confirms the emotional outlook which a dying man has come to need in his supreme conflict. After death the bereaved are thrown into a chaos of emotion, which might become dangerous to each of them individually and to the community as a whole were it not for the ritual of mortuary duties. The religious rites of wake and burial—all the assistance given to the departed soul—are acts expressing the dogma of continuity after death and of communion between dead and living. Any survivor who has gone through a number of mortuary ceremonials for others becomes prepared for his own death. The belief in immortality, which he has lived through ritually and practised in the case of his mother or father, of his brothers and friends, makes him cherish more firmly the belief in his own future life. The belief in human immortality therefore, which is the foundation of ancestor worship, of domestic cults, of mortuary ritual and of animism, grows out of the constitution of human society.

Most of the other forms of religion when analyzed in their functional character correspond to deep although derived needs of the individual and of the community. Totemism, for example, when related to its wider setting affirms the existence of an intimate kinship between man and his surrounding world. The ritual side of totemism and nature worship consists to a large extent in rites of multiplication or of propitiation of animals or in rites of enhancing the fertility of vegetable nature which also establish links between man and his environment. Primitive religion is largely concerned with the sacralization of the crises of human life. Conception, birth, puberty, marriage, as well as the supreme crisis death, all give rise to sacramental acts. The fact of conception is sur-

rounded by such beliefs as that in reincarnation, spirit entry and magical impregnation. At birth a wealth of animistic ideas concerning the formation of the human soul, the value of the individual to his community, the development of his moral powers, the possibility of forecasting his fate, become associated with and expressed in birth ritual. Initiation ceremonies, prevalent in puberty, have a developed mythological and dogmatic context. Guardian spirits, tutelary divinities, culture heroes or a tribal All-Father are associated with initiation ceremonies. The contractual sacraments, such as marriage, entry into an age grade or acceptance into a magical or religious fraternity, entail primarily ethical views but very often are also the expression of myths and dogmas.

Every important crisis of human life implies a strong emotional upheaval, mental conflict and possible disintegration. The hopes of a favorable issue have to struggle with anxieties and forebodings. Religious belief consists in the traditional standardization of the positive side in the mental conflict and therefore satisfies a definite individual need arising out of the psychological concomitants of social organization. On the other hand, religious belief and ritual by making the critical acts and the social contracts of human life public, traditionally standardized and subject to supernatural sanctions strengthen the bonds of human cohesion.

Religion in its ethics sanctifies human life and conduct and becomes perhaps the most powerful force of social control. In its dogmatics it supplies man with strong cohesive forces. It grows out of every culture, because knowledge which gives foresight fails to overcome fate; because lifelong bonds of cooperation and mutual interest create sentiments, and sentiments rebel against death and dissolution. The cultural call for religion is highly derived and indirect but is finally rooted in the way in which the primary needs of man are satisfied in culture.

Plays, games, sports and artistic pastimes tear man out of his ordinary rut and remove the strain and the discipline of workaday life, fulfilling the function of recreation, of restoring man to full capacity of routine work. The function of art and play is, however, more complicated and more comprehensive, as may be shown by an analysis of its part in culture. The free untrammelled exercise of infancy is neither play nor game: it combines both. The biological needs of the organism demand that the infant shall employ his limbs and his lungs, and this

free exercise supplies his earliest training as well as his real adaptation to his surroundings. Through his voice the infant appeals to his parents or guardians and thus enters into relation to his society and through this to the world at large. Even these activities, however, do not remain completely free and controlled by physiology only. Every culture determines the latitude which may be given to the freedom of muscular movement—from the swaddled or bound child which can hardly move to the complete liberty of the naked infant. Culture also defines the limits within which the child is allowed to cry and scream and dictates the promptness of parental response and the severity of customary repression. The degree to which earliest behavior is molded, the manner in which words and acts are woven into infantile expression, allow tradition to influence the young organism through its human surroundings. The earliest phases of human play, which is also human work, are therefore of considerable importance, and they must be studied not merely in the behaviorist's laboratory or the psychoanalyst's consulting room but also in the ethnographic field, since they vary with every culture.

The plays and exercise of the next stage, when the child learns to speak and to use his arms and legs, link up directly with the earliest pastimes. The importance of childish playful behavior consists in its relation to the educational influences contained in it, the cooperation with others and with other children. Later the child becomes independent of his parents or guardians to the extent that he joins other children and plays with them. Often the children form a special community having its own rudimentary organization, leadership and economic interests—a community which at times provides its own nourishment—and in complete independence spend days and nights away from the parental homes. At times boys and girls play in separate groups; or again they join in one group, in which case eroticism and sexual interests may or may not enter into the play. The games are usually either in imitation of the adults or contain some parallel activities. They are very seldom completely different from the things in which the child will be engaged after maturity. Thus a great deal of the future adaptation to life is learned in this period. The moral code is developed, the salient features of the character are formed and the friendships or loves of future life are started. This period often contains a partial weaning from family life. It ends in the

ceremonies of initiation into manhood and often at that time begins the formation of wider bonds of clanship, of age grades, secret societies and tribal citizenship. The main function of juvenile play is therefore educational, while the recreative side is practically non-existent as long as and to the extent that the young people do not take part in the regular work of the community.

The plays and recreations of adults usually present a continuous development from those of children. In civilized and primitive communities alike there is often no sharp line of demarcation between adult and juvenile games and plays, and frequently the old and the young join together for their amusements; but in the case of the adults the recreative nature of such pursuits becomes prominent. In the change of interests, in the transformation from the normal and drab to the rare and occasional, culture makes good another of the difficulties with which it burdens man. In more primitive societies recreation is very often as monotonous and strenuous as the routine work, but it is always different. Hours are spent on the completion and perfection of a small object, on practising a dance or on the artistic finish of some decorative board or figure. The activity, however, is always complementary. A type of manual and mental strain, not met in the ordinary occupations, allows man to do hard work and to tap new sources of nervous and muscular energy. Recreation thus does not serve merely to lead man away from his ordinary occupations; it contains also a constructive or creative element. The dilettante in higher cultures produces often the best work and devotes his best energies to his hobby. In primitive civilizations the vanguard of progress is often found in works of leisure and supererogation. Advances in skill, scientific discoveries, new artistic motifs, are allowed to filter in through the playful activities of recreation, and thus they receive that minimum of traditional resistance which is associated with activities not yet taken very seriously.

Plays of a different character, entirely non-productive and non-constructive, such as round games, competitive sports and secular dances, do not possess this creative function, but instead they play a part in the establishment of social cohesion. The atmosphere of relaxation, of freedom, as well as the need of larger gatherings for such communal games, leads to the formation of new bonds. Friendships and love intrigues, better knowledge of distant relatives or clansmen, competition with others and solidarity

within the competing teams—all these social qualities are developed through the public games which form such a characteristic feature of primitive tribal life as well as of civilized organization. In primitive communities there takes place often a complete sociological recrystallization during big ceremonial games and public performances. The clan system comes into prominence. The distribution into families and local groups is obliterated. New non-territorial loyalties are developed. In civilized communities the type of national pastime contributes effectively to the formation of the national character.

Art seems to be the most exclusive and at the same time the most international, even inter-racial, of all cultural activities. Music is unquestionably the purest of all arts, the one least alloyed with extrinsic intellectual or technical matters. Whether it be an Australian corroboree with its monotonous yet penetrating chanting or a symphony of Beethoven or the songs which accompany a dance in a pueblo or a Melanesian sailing song, art speaks alone, making use of no intellectual symbols or conventions, appealing to nothing but the direct response to combinations of sounds and to rhythm. In dancing the rhythmic effects are achieved by the movements of the body, more especially of the arms and legs, carried out in conjunction with vocal or instrumental music. Decorative arts consist in the ornamentation of the body, in the various colors and shapes of clothing, in the painting and carving of objects and in representative drawing or painting. Plastic art, sculpture and architecture, wood, stone or compound structures are fashioned according to certain aesthetic criteria. Poetry, the use of language for the production of aesthetic effect, and dramatic art are in a developed form perhaps less uniformly distributed, but they are never completely absent.

All artistic manifestations operate primarily through the direct action of sense impressions. The tone of the human voice or of vibrating chords or membranes, the noises of a rhythmical nature, the words of human language, color, line, shape, bodily movement are, physiologically speaking, sensations and sense impressions. These as well as their combinations produce a specific emotional appeal which is the *materia prima* of art and which constitutes the essence of the aesthetic appeal. At the lowest scale of artistic enjoyment are the effects of chemical sense impressions, those of taste and of scent,

which also produce a limited aesthetic appeal. The direct sensuous appeal of scents and of food and the physiological effects of narcotics show that human beings systematically hanker after a modification of their bodily experiences, that there is a strong desire to be lifted out of the ordinary drab routine of everyday life into a different, transformed and subjectively orientated world. The response to sense impressions and their compounds, to rhythmic sequences, to harmony and melody in music, to the line of designs and the combination of colors, is organically founded. The artistic imperative is a primary need; it is the chief function of art to satisfy this craving of the human organism for combinations of blended sense impressions.

Art becomes associated with other cultural activities and develops a series of secondary functions. It is a powerful element in the development of crafts and of economic values. The craftsman loves his material, takes pride in his skill and feels a creative thrill for new forms which come into being under his hands. The creation of complex and perfect forms in rare and especially amenable or especially difficult material is one of the secondary roots of aesthetic satisfaction. The forms created appeal to all members of the community, give the artist a high standing and set the seal of economic value on such objects. The joy of craftsmanship, the aesthetic satisfaction in the finished product and social recognition blend with and react on each other. A new incentive to good work is given, and a standard of value is established within each art or craft. Some of the objects which have often been labeled money or currency, but which in reality are merely tokens of wealth and expressions of the value of skill and material, are illustrations of these combined aesthetic, economic and technological standards. The shell disks of Melanesia, made with special skill in a rare material, the rolled up mats of Samoa, the blankets, brass plates and carvings of British Columbia, are important to an understanding of primitive economics, aesthetics and social organization.

The deep association of art with religion is a commonplace in civilized cultures and it is present in simple ones as well. Plastic reproductions of supernatural beings—idols, totemic carvings or paintings—ceremonies such as those associated with death, initiation or sacrifice function to bring man near to those supernatural realities on which all his hopes center, which inspire him with deep apprehensions and,

in short, move and affect his whole emotional being. Accordingly, everywhere mortuary ceremonies are associated with ritualized wailing, with songs, with the transformation of the corpse, with dramatic enactments. In some religions, notably that of Egypt, the concentration of art around the mummy, the necropolis and the whole dramatized and creative representation of the passage from this to the next world have reached an extraordinary degree of complexity. Initiation ceremonies, from the crude but elaborate performances of central Australian tribes to the Eleusinian mysteries and the Masonic ritual, are dramatized artistic performances. Classical and modern drama, the Christian mystery plays and the dramatic art of the Orient have probably originated in some such early dramatized ritual.

In big tribal gatherings the union in aesthetic experiences of common dancing, singing and the display of decorative art or of artistically arranged objects of value, sometimes even accumulated food, bind together the group with strong unified emotions. Hierarchy, the principle of rank and social distinction, is very often expressed in privileges of exclusive ornamentation, of privately owned songs and dances and of the aristocratic standing of dramatic fraternities such as the Areoi and Ulitao of Polynesia.

Art and knowledge are strongly akin. In naturalistic and representative art are embodied always a good deal of correct observation and an incentive to the study of the surroundings. The symbolism of art and scientific diagram are often strongly connected. The aesthetic drive integrates knowledge at low and at high levels. Proverbs, anagrams and tales, above all historical narrative, have been in primitive cultures and are in their developed forms very often a mixture of art and of science.

The meaning or significance of a decorative motif, a melody or a carved object cannot therefore be found in isolating it, in tearing it out of its context. In modern art criticism it is customary to regard a work of art as an individual message from the creative artist to his audience, the expression of an emotional or intellectual state translated through the work of art from one man to another. Such a conception is useful only if the whole cultural context and the tradition of art are taken for granted. Sociologically it is always incorrect; and the work of H. Taine and his school, who have placed all the emphasis on the relation between a work of art and its milieu, is a very important corrective to any

subjective and individualistic aesthetics. Primitive art is invariably a popular or folk creation. The artist takes over the tradition of his tribe and merely reproduces the carving, the song, the tribal mystery play. The individual who thus reproduces a traditional work always adds something to it, modifies it in the reproduction. These small individual quotas, embodied and condensed in the gradually growing tradition, integrate and become part of the body of artistic production. The individual quotas are determined not only by the personality, inspiration or creative talent of the individual contributor but also by the manifold associations of art with its context. The fact that a carved idol is the object of dogmatic and religious belief and of religious ritual defines to a large extent its shape, size and material. The fact that a mystery play is an important center of tribal life influences the way in which it may be modified and in which it has to be reproduced. Like many other artifacts or human productions the work of art becomes part of an institution, and its whole growth as well as its functions can only be understood if it is studied within its institutional context.

Culture is then essentially an instrumental reality which has come into existence to satisfy the needs of man in a manner far surpassing any direct adaptation to the environment. Culture endows man with an additional extension of his anatomical apparatus, with a protective armor of defenses and safeguards, with mobility and speed through media where his direct bodily equipment would have entirely failed him. Culture, the cumulative creation of man, extends the range of individual efficiency and of power of action; and it gives a depth of thought and breadth of vision undreamed of in any animal species. The source of all this consists in the cumulative character of individual achievements and in the power to share in common work. Culture thus transforms individuals into organized groups and gives these an almost indefinite continuity. Man is certainly not a gregarious animal in the sense that his concerted actions are due to physiological and innate endowment and carried on in patterns common to the whole species. Organization and all concerted behavior, the results of traditional continuity, assume a different form for every culture. Culture deeply modifies human innate endowment, and in doing this it not only bestows blessings but also imposes obligations and demands the surrender of a great many personal liberties to the common welfare. The individual has to submit

to order and law; he has to learn and to obey tradition; he has to twist his tongue and to adjust his larynx to a variety of sounds and to adapt his nervous system to a variety of habits. He works and produces objects which others will consume, while in turn he is always dependent upon alien toil. Finally, his capacity of accumulating experience and letting it foretell the future opens new vistas and creates gaps which are satisfied in the systems of knowledge, of art and of magical and religious beliefs. Although culture is primarily born out of the satisfaction of biological needs, its very nature makes man into something essentially different from a mere animal organism. Man satisfies none of his needs as mere animal. Man has his wants as an implement making and implement using creature, as a communing and discoursing member of a group, as the guardian of a traditional continuity, as a toiling unit within a co-operative body of men, as one who is haunted by the past or in love with it, as one whom the events to come fill with hopes and with anxieties and finally as one to whom the division of labor and the provisions for the future have given leisure and opportunities to enjoy color, form and music.

BRONISLAW MALINOWSKI

See: ANTHROPOLOGY; MÁN; SOCIAL PROCESS; CIVILIZATION; CUSTOM; TRADITION; LANGUAGE; COMMUNICATION; INSTITUTION; SOCIAL ORGANIZATION; KINSHIP; MARRIAGE; BIRTH CUSTOMS; DEATH CUSTOMS; RELIGION; MAGIC; ECONOMIC ORGANIZATION; MACHINES AND TOOLS; EDUCATION; ETIQUETTE; LAW; ART; PLAY; EVOLUTION, SOCIAL; DIFFUSIONISM; FUNCTIONALISM.

Consult: Malinowski, Bronislaw, "Magic, Science and Religion" in *Science, Religion, and Reality*, ed. by Joseph Needham (London 1925) p. 19-84, *Argonauts of the Western Pacific* (London 1922), *The Sexual Life of Savages* (London 1929), and *Sex and Repression in Savage Society* (London 1927); Spier, Leslie, "Historical Interrelation of Culture Traits: Franz Boas' Study of Tsimshian Mythology," and Lasswell, Harold D., "A Hypothesis Rooted in the Preconceptions of a Single Civilization Tested by Bronislaw Malinowski" in *Methods in Social Science*, ed. by Stuart A. Rice (Chicago 1931) p. 449-57, and 480-88; Boas, Franz, "Limitations of the Comparative Method of Anthropology" in *Science*, n.s., vol. iv (1896) 901-08, and *The Mind of Primitive Man* (New York 1911); Lowie, R. H., *Culture and Ethnology* (New York 1917), and *Are We Civilized?* (New York 1929); Sapir, Edward, *Language* (New York 1921); Goldenweiser, Alexander, "Anthropology and Psychology" in *The Social Sciences*, ed. by W. F. Ogburn and Alexander Goldenweiser (Boston 1927) ch. vii; Wissler, Clark, *Man and Culture* (New York 1923); Smith, G. Elliot, and others, *Culture* (London 1927); Rivers, W. H. R., "The Ethnological Analysis of Culture" in his

CUSTODI, PIETRO (1771-1842), Italian journalist and economist. Custodi was a native of Piedmont and a lawyer by profession. During the period of unrest preceding the Napoleonic reorganization of Italy he became editor of two short lived republican newspapers, *La tribuna del popolo* and *L'amico della libertà italiana*. Napoleon caused him to be arrested but after the establishment of the Kingdom of Italy he restored him to favor, appointing him secretary general of the finance department of Milan and later state councilor. Under the empire Custodi was created baron. His fame rests upon the great *Scrittori classici italiani di economia politica* (50 vols., Milan 1803-16), in which he collected and elucidated with biographical and critical notices the writings of the chief Italian economists from the earliest times down to the beginning of the nineteenth century. To Custodi more than to any other individual is due the credit for the propagation throughout the scholarly world of the economic ideas evolved in Italy before Adam Smith. Many of the works included in his collection, such as the lectures of Beccaria, had never before been printed. Custodi also published *Cesare Beccaria* (Padua 1811), one of the early biographies of the great penologist, and *Storia di Milano* (4 vols., Milan 1824-25; later ed. 2 vols., Florence 1851), including and continuing the work by Pietro Verri. Together with Gioja and Romagnosi he founded in 1824 *Cui noli universali di economia pubblica*, which remained until its discontinuance in 1871 the leading Italian economic review.

LUIGI EINAUDI

Consult: Sangiorgio, G., *Pietro Custodi, economista* (Florence 1875).

CUSTOM. The word custom is used to apply to the totality of behavior patterns which are carried by tradition and lodged in the group, as contrasted with the more random personal activities of the individual. It is not properly applicable to those aspects of communal activity which are obviously determined by biological considerations. The habit of eating fried chicken is a custom, but the biologically determined habit of eating is not.

Custom is a variable common sense concept which has served as the matrix for the development of the more refined and technical anthropological concept of culture. It is not as purely denotative and objective a term as culture and has a slightly affective quality indicated by the fact that one uses it more easily to refer to

geographically remote, to primitive or to bygone societies than to one's own. When applied to the behavior of one's own group the term is usually limited to relatively unimportant and unformalized behavior patterns which lie between individual habits and social institutions. Cigarette smoking is more readily called a custom than is the trial of criminals in court. However, in dealing with contemporary Chinese civilization, with early Babylonian culture or with the life of a primitive Australian tribe the functional equivalent of such a cultural pattern as our court trial is designated as custom. The hesitation to describe as custom any type of behavior in one's own group that is not at once collective and devoid of major importance is perhaps due to the fact that one involuntarily prefers to put the emphasis either on significant individualism, in which case the word habit is used, or on a thoroughly rationalized and formalized collective intention, in which case the term institution seems in place.

Custom is often used interchangeably with convention, tradition and mores, but the connotations are not quite the same. Convention emphasizes the lack of inner necessity in the behavior pattern and often implies some measure of agreement, express or tacit, that a certain mode of behavior be accepted as proper. The more symbolic or indirect the function of a custom, the more readily is it referred to as a convention. It is a custom to write with pen and ink; it is a convention to use a certain kind of paper in formal correspondence. Tradition emphasizes the historic background of custom. No one accuses a community of being wanting in customs and conventions, but if these are not felt as possessed of considerable antiquity a community is said to have few if any traditions. The difference between custom and tradition is more subjective than objective, for there are few customs whose complete explanation in terms of history does not take one back to a remote antiquity. The term mores is best reserved for those customs which connote fairly strong feelings of the rightness or wrongness of modes of behavior. The mores of a people are its unformulated ethics as seen in action. Such terms as custom, institution, convention, tradition and mores are, however, hardly capable of a precise scientific definition. All of them are reducible to social habit or, if one prefers the anthropological to the psychological point of view, to cultural pattern. Habit and culture are terms which can be defined with some degree of precision and

should always be substituted for custom in strictly scientific discourse, habit or habit system being used when the locus of behavior is thought of as residing in the individual, cultural pattern or culture when its locus is thought of as residing in society.

From a biological standpoint all customs are in origin individual habits which have become diffused in society through the interaction of individual upon individual. These diffused or socialized habits, however, tend to maintain themselves because of the unbroken continuity of the diffusion process from generation to generation. One more often sees custom helping to form individual habit than individual habit being made over into custom. In the main, group psychology takes precedence over individual psychology. In no society, however primitive or remote in time, are the interactions of its members not controlled by a complex network of custom. Even at an early stage of the palaeolithic period human beings must have been ruled by custom to a very considerable extent, as is shown by the rather sharply delimited types of artifacts that were made and the inferences that can be drawn from some of these as to beliefs and attitudes.

The crystallization of individual habit into custom is a process that can be followed out theoretically rather more easily than illustrated in practise. A distinction can be made between customs of long tenure and customs of short tenure generally known as fashions. Fashions are set by a specific individual or group of individuals. When they have had a long enough lease of life to make it seem unimportant to recall the source or original locality of the behavior pattern, they have become customs. The habit of wearing a hat is a custom, but the habit of wearing a particular style of hat is a fashion subject to fairly rapid change. In the sphere of language custom is generally referred to as usage. Uncrystallized usages of speech are linguistic fashions, of which slang forms a particular variety. Food habits too form a well recognized set of customs, within which arise human variations that may be called fashions of food and that tend to die out after a brief period. Fashions are not to be considered as additions to custom but rather as experimental variations of the fundamental themes of custom.

In course of time isolated behavior patterns of a customary nature tend to group themselves into larger configurations which have a formal cohesion and which tend to be rationalized as

functional units whether they are such historically or not. The whole history of culture has been little more than a ceaseless effort to connect originally independent modes of behavior into larger systems and to justify the secondary culture complexes by an unconscious process of rationalization. An excellent example of such a culture complex, which derives its elements from thousands of disparate customs, is the modern musical system, which is undoubtedly felt by those who make use of it to be a well compacted functional whole with various elements that are functionally interdependent. Historically, however, it is very easy to prove that the system of musical notation, the rules of harmony, the instrumental techniques, the patterns of musical composition and the conventional uses of particular instruments for specific purposes are independently derivable from customs of very different provenience and of very different age, and that it is only by slow processes of transfer of use and progressive integration of all these socialized modes of behavior that they have come to help each other out in a complex system of unified meanings. Hundreds of parallel instances could be given from such diverse fields of social activity as language, architecture, political organization, industrial technique, religion, warfare and social etiquette.

The impermanence of custom is a truism. Belief in the rapidity of change of custom is exaggerated, however, because it is precisely the comparatively slight divergences from what is socially established that arouse attention. A comparison of American life today with the life of a mediaeval English town would in the larger perspective of cultural anthropology illustrate rather the relative permanence of culture than its tendency to change.

The disharmony which cumulatively results from the use of tools, insights or other manipulative types of behavior which had enriched the cultural stock in trade of society a little earlier results in change of custom. The introduction of the automobile, for instance, was not at first felt as necessarily disturbing custom, but in the long run all those customs appertaining to visiting and other modes of disposing of one's leisure time have come to be seriously modified by the automobile as a power contrivance. Amenities of social intercourse felt to be obstructive to the free utilization of this new source of power tend to be dismissed or abbreviated. Disharmony resulting from the rise of new values also makes

for change in custom. For example, the greater freedom of manner of the modern woman as contrasted with the far more conventionally circumscribed conduct of women of generations ago has come about because of the rise of a new attitude toward woman and her relation to man. The influences exerted by foreign peoples, e.g. the introduction of tea and coffee in occidental society and the spread of parliamentary government from country to country, are stressed by anthropologists more than by the majority of historians and sociologists as determinants of change. Most popular examples of the imposition of fashions which proceed from strategic personalities are probably fanciful and due to a desire to dramatize the operation of the more impersonal factors, which are much more important in the aggregate than the specific personal ones. With the gradual spread of a custom that is largely symbolic and characteristic of a selected portion of the population, the fundamental reason for its continuance weakens, so that it either dies out or takes on an entirely new function. This mechanism is particularly noteworthy in the life of language. Locutions which are considered smart or chic because they are the property of privileged circles are soon taken up by the masses and then die because of their banality. A much more powerful and exact knowledge of the nature of individual interaction, particularly as regards the unconscious transfer of feeling, is needed before a really satisfying theory of cultural change can be formulated.

Those customs survive the longest which either correspond to so basic a human need that they cannot well be seriously changed or else are of such a nature that they can easily be functionally reinterpreted. An example of the former type of persistence is the custom of having a mother suckle her child. There are numerous departures from this rule, yet both modern America and the more primitive tribes preserve as a custom a mode of behavior which obviously lies close to the life of man in nature. An example of the latter type of persistence, which may be called adaptive persistence, is language, which tends to remain fairly true to set form but which is constantly undergoing re-interpretation in accordance with the demands of the civilization which it serves. For example, the word robin refers in the United States to a very different bird from the English bird that was originally meant. The word could linger on with a modified meaning because it is a symbol

and therefore capable of indefinite reinterpretation.

The word survival should not be used for a custom having a clearly defined function which can be shown to be different from its original place and significance in culture. When used in the latter, looser sense the word survival threatens to lose all useful meaning. There are few customs among us today which are not survivals in this sense. There are, however, certain customs which it is difficult to rationalize on any count and which may be looked upon as analogous to rudimentary organs in biology. The useless buttons in modern clothing are often cited as an example of such survivals. The use of Roman numerals alongside of Arabic numerals may also be considered a survival. On the whole, however, it seems safest not to use the word too freely, for it is difficult to prove that any custom, no matter how apparently lacking in utility or how far removed from its original application, is entirely devoid of at least symbolic meaning.

Custom is stronger and more persistent in primitive than in modern societies. The primitive group is smaller, so that a greater degree of conformity is psychologically necessary. In the more sophisticated community, which numbers a far larger total of individuals, departure from custom on the part of a few selected individuals, who may in turn prove instrumental for a change of culture in the community at large, does not matter so much for the solidarity of the group to begin with, because the chance individual of the group finds himself reinforced by the vast majority of his fellow men and can do without the further support of the deviants. The primitive community has also no written tradition to appeal to as an impersonal arbiter in matters of custom and therefore puts more energy into the conservation of what is transmitted through activity and oral tradition. The presence of documents relieves the individual from the necessity of taking personal responsibility for the perpetuation of custom. Far too great stress is usually laid on the actually conserving, as contrasted with the symbolically conserving, power of the written word. Custom among primitive peoples is apt to derive some measure of sacredness from its association with magical and religious procedures. When a certain type of activity is linked with a ritual which is in turn apt to be associated with a legend that to the native mind explains the activity in question, a radical departure from the traditionally conserved pattern

of behavior is felt as blasphemous or perilous to the safety of the group. There is likewise a far lesser division of labor in primitive communities than in our own, which means that the forces making for experimentation in the solution of technical problems are proportionately diminished.

In the modern world custom tends to be much more conservative in the rural districts than in the city, and the reasons are similar to those given for the greater persistence of custom among primitive peoples. The greater scatter of the rural population does not generally mean the more intensive individual cultivation of the forms of custom but rather a compensatory effort to correct the threats of distance by conformity.

Within a complex community, such as is found in modern cities, custom tends to be more persistent on the whole in the less sophisticated groups. Much depends on the symbolism of a custom. There are certain types of custom, particularly such as are symbolic of status, which tend to be better conserved in the more sophisticated or wealthy groups than in the less sophisticated. The modern American custom, for instance, of having a married woman keep her maiden name is not likely soon to take root among the very wealthy, who here join hands with the unsophisticated majority, while the custom is being sparsely diffused among the intellectual middle class.

The varying degrees of conservatism in regard to custom can be illustrated in the behavior of a single individual because of the different types of social participation into which he enters. In England, for instance, the same individual may be in the vanguard of custom as a Londoner but insistent on the preservation of rural custom as a country squire. An American university man may be disdainful of customary opinion in his faculty club but be meekly observant of religious custom on Sunday at church. Loyalty or departure from custom is not a simple function of temperament or personality but part and parcel of the symbolism of multiple participation in society.

Custom is generally referred to as a constraining force. The conflict of individual will and social compulsion is familiar, but even the most forceful and self-assertive individual needs to yield to custom at most points in order that he may gain leverage, as it were, for the imposition of his personal will on society, which cannot be conquered without the implicit capture of social

consent. The freedom gained by the denial of custom is essentially a subjective freedom of escape rather than an effective freedom of conquest. Custom makes for a powerful economy in the learning of the individual; it is a symbolic affirmation of the solidarity of the group. A by-product of these fundamental functions of custom is the more sentimental value which results from an ability to link the present and the past and thus to establish a larger ego in time, which supplements with its authority the larger ego represented by the community as it functions in the present.

The formulation of customs in the sphere of the rights and duties of individuals in their manifold relations leads to law. It is not useful to use the term law, as is often vaguely done in dealing with primitive societies, unless the enforcement of customary activity be made explicit, being vested in particular individuals or bodies of individuals. There are no societies that are wholly free from the binding force of implicit law, but as there are also many primitive societies which recognize some type of legal procedure it seems much better to speak of law only in the latter case. There are, for instance, few American Indian tribes in which customary obligations are recognized as a system of law that is capable of enforcement by the community. Psychologically law prevails, but not institutionally. This is in rather sharp contrast to the legal procedure which has been developed by the majority of African tribes. Here there is not merely the law of custom in an implicit sense but the perfectly explicit recognition of rules of conduct and of punishment for their infringement, with an elaborate method of discovering guilt and with the power of inflicting punishment vested in the king. The example of African law indicates that the essential difference between custom and law does not lie in the difference between oral tradition and the written formulation of custom. Law can emerge from custom long before the development of writing and has demonstrably done so in numerous cases. When custom has the psychological compulsion of law but is not controlled by society through the imposition of explicit penalties it may be called ethics or, more primitively, mores. It is difficult to distinguish law and ethics in the more simple forms of society. Both emerge from custom but in a somewhat divergent manner. Mundane or human sovereignty becomes progressively distinguished from socially diffused or supernatural or impersonal sover-

eignty. Custom controlled by the former is law; custom controlled by the latter is ethics.

The agencies instrumental in the formation of custom are for the most part quite impersonal in character and implicit in the mere fact of human interrelationships. There are also more self-conscious agencies for the perpetuation of custom. Among these the most important are law and religion, the latter particularly in the form of an organized church and priesthood. There are also organizations which are sentimentally interested in the conservation of customs which threaten to go out of use. In the modern world one often sees a rather weak nationalistic cause bolstered up by the somewhat artificial fostering of archaic custom. Much of the ritualism of the modern Scottish clans is secondarily rather than lineally conservative.

If complicated forms of conscious manipulation of ideas and techniques which rule the modern world are excluded from the range of the term custom, the force of custom may be said to be gradually lessening. The factors which favor this weakening of custom are: the growing division of labor with its tendency to make society less and less homogeneous; the growing spirit of rationalism, in the light of which much of the justification of custom fades away; the growing tendency to break away from local tradition; and, finally, the greater store set by individuality. The ideal which is latent in the modern mind would seem to be to break up custom into the two poles of individually determined habit on the one hand and of large scale institutional planning for the major enterprises of mankind on the other.

EDWARD SAPIR

See: CULTURE; FOLKWAYS; HABIT; INDIVIDUALISM; TRADITION; CONVENTIONS, SOCIAL; MORALS; FASHION; ETIQUETTE; INSTITUTION; SOCIAL PROCESS; CONTINUITY, SOCIAL; CHANGE, SOCIAL; CONFORMITY; CUSTOMARY LAW.

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CUSTOMARY LAW. In its origin customary law appears to be only a differentiated form of general custom. The basis of both law and custom is precedent, which, according to Holland, is illustrated by "the mode in which a path is formed across a common." One man crosses either by accident or design; others are likely to follow in the same track until a path is worn. Pollock cites the child's appeal to precedent in order to avoid some present parental prohibition, and the force of habit prevails in the whole early history of the race. But while the mechanical repetition of acts explains the origin of many usages which come to be recognized as law, it does not indicate the point at which the differentiation between law and custom occurs.

The problem of the nature of customary law has been prominent in juristic theory, and the conclusions reached by jurists have depended upon their views of the nature of law in general. The two dominating modern theories have been those of the analytical school of Austin and the historical school of Savigny. The former, regarding law as the command of the political state prescribing a certain line of conduct in all cases of a similar character, enforceable by specific sanctions in the event of disobedience, has tended to slight customary law and scarcely to admit its existence. On the other hand, the historical school has tended to exalt customary law as a spontaneous expression of the genius of a people, arising from its juristic consciousness and determining subjectively when rules shall be regarded as legal. Later jurists have variously exhibited the influence of both views.

Thus Maine issues a warning against the application of the Austinian view as a test of customary law. He implies that custom begins to be law when it is brought into dispute and some means is provided for declaring or recognizing its obligatory character. According to Munroe Smith customary law arises at "the point at which the infliction of penalties affecting the property or the person begins to be assured." In other words, custom does not become law until it acquires a clear and definite sanction. However much this may be true of a mature legal system, the better opinion is that it is not true of customary law. In early law sanctions are often imperfect and informal. Thus hardly anything more can be said than that custom becomes law when it is recognized in some way as governing a class of relations segregated as juridical, i.e. the family, debt, injury.

Although it is difficult to say exactly when

in his *L'histoire générale des voyages* (1746-70), but according to a methodical outline of the folkways. In the introduction to his work Dèmeunier declared that his object was not to point out the "bizarre or ridiculous" in human customs but on the contrary to "discover their spirit" that "instead of inveighing against abuses we must study dispassionately their origins," and that "no matter what the custom be, it had a cause as its principle." Furthermore, he believed that explanations of these customs might be attempted only cautiously and only if the travelers' observations were subjected to criticism. Like Charles de Brosses before him in *Du culte des dieux fétiches* (1760) Dèmeunier discovered relations between archaic and exotic folkways; he traced similarities in the political and social institutions of peoples as remote from each other in time and space as the natives of the Society and Friendly Islands, American aborigines and the Greeks, and maintained that they are caused by the similarity of "inspirations of nature." That he was aware of peculiar differences among these customs as well as of their similarities attests the importance of Dèmeunier as one of the founders of sociology.

RENÉ MAUNIER

Other important works: *Essais sur les États-Unis* (Paris 1786); *Économie politique et diplomatique*, Encyclopédie Méthodique, 4 vols. (Paris 1784-88); *L'Amérique indépendante, ou les différentes constitutions des treize provinces*, 3 vols. (Gand 1790).

Consult: Van Gennep, A., "Un ethnographe oublié du XVIII^e siècle: J. N. Dèmeunier" in *Revue des idées*, vol. vii (1910) 18-28.

DEMOBILIZATION. *See* MOBILIZATION AND DEMOBILIZATION.

DEMOCRACY. No definition of democracy can adequately comprise the vast history which the concept connotes. To some it is a form of government, to others a way of social life. Men have found its essence in the character of the electorate, the relation between government and the people, the absence of wide economic differences between citizens, the refusal to recognize privileges built on birth or wealth, race or creed. Inevitably it has changed its substance in terms of time and place. What has seemed democracy to a member of some ruling class has seemed to his poorer fellow citizen a narrow and indefensible oligarchy. Democracy has a context in every sphere of life; and in each of those spheres it raises its special problems which do not admit of satisfactory or universal generalization.

The political aspect of democracy has the earliest roots in time. For the most part it remained a negative concept until the seventeenth century. Men protested against systems which upon one ground or another excluded them from a share in power. They were opposed to an oligarchy which exercised privileges confined to a narrow range of persons. They sought the extension of such privileges to more people on the ground that limitation was not justifiable. They felt and argued that exclusion from privilege was exclusion from benefit; and they claimed their equal share in its gains.

That notion of equality points the way to the essence of the democratic idea—the effort of men to affirm their own essence and to remove all barriers to that affirmation. All differentials by which other men exercise authority or influence they do not themselves possess hinder their own self-realization. To give these differentials the protection of the legal order is to prevent the realization of the wishes and interests of the mass of men. The basis of democratic development is therefore the demand for equality, the demand that the system of power be erected upon the similarities and not the differences between men. Of the permanence of this demand there can be no doubt; at the very dawn of political science Aristotle insisted that its denial was the main cause of revolutions. Just as the history of the state can perhaps be most effectively written in terms of the expanding claims of the common man upon the results of its effort, so the development of the realization of equality is the clue to the problem of democracy.

This is indeed to state in a general way what is more usually seen in narrower terms. There have been times—in England, for instance, in the nineteenth century—when democratic government was largely taken to mean the extension of the suffrage. At other times, as in Oregon in the early years of the present century, the participation of the people in the process of government by means of the initiative and the referendum seemed that indispensable condition without which democracy was a shadowy figment. Others have made it depend upon the power of the majority to have its way. The basis of the feminist movement was the claim that so long as women are excluded from full and direct participation in political life democratic government cannot be said to have been realized. The number of political mechanisms, from proportional representation to the direct primary,

upon which alone a democratic government has been held to be valid is very large; but analysis of them will show that at bottom the effort of their proponents has been to prevent the operation of a policy which excludes some people from the benefits of the state. They have in fact been aiming at the realization of some form of equality not previously acquired.

It is because political equality, however profound, does not permit the full affirmation of the common man's essence that the idea of democracy has spread to other spheres. The discovery that men may be politically equal without attaining a genuine realization of their personalities was seen by not a few during the Puritan revolution, and the demand for economic equality was loudly and ably voiced there by Winstanley and his followers. It was only, however, with the French Revolution that economic equality may be said to have become a permanent part of the democratic creed. From that time, particularly in the context of socialist principle, it has been increasingly insisted that in the absence of economic equality no political mechanisms will of themselves enable the common man to realize his wishes and interests. Economic power is regarded as the parent of political power. To make the diffusion of the latter effective, the former also must be widely diffused. To divide a people into rich and poor is to make impossible the attainment of a common interest by state action. Economic equality is then urged as the clue upon which the reality of democracy depends.

The demand for social equality is both older and more recent than that for either political or economic equality. Protest against the possession of privilege by birth goes back to a very early period. So also a refusal to accept the status of inferiority which slavery implies is probably as old as slavery itself. Each of these is a somewhat crude form of the demand. More subtle are claims to religious equality, to educational equality, to that equal participation in the results of social discovery which is marked by the development of communal efforts toward the improvement of health and housing, the provision of public libraries and recreation and so forth. There is, it is maintained, a kind of eminent domain which entitles the state deliberately to intervene to mitigate the consequences of social inequality. This claim is important, because the method on which it relies—taxation as a rule, but on occasion expropriation, whether revolutionary or otherwise—has the inevitable

effect of producing a simultaneous approach to economic equality, and it is significant that the use of this method should, as a rule although not invariably, be one of the consequences of the attainment of political equality. Included in this aspect also is the idea of equality before the law. The proponents of democracy affirm that in the courts of a state there can be no difference between persons: poor and rich, atheist and Christian, black and white, must in similar circumstances be treated similarly by the law. And what is interesting in this context is the early affirmation that a legal equality which remains purely formal is necessarily unsubstantial. It is found that access to the courts is a matter largely dependent upon economic position; and a demand is soon made for equality in those realms which give reality to that access. Since also the legal doctrines of a court mainly take their color from the character of the prevailing economic order, the demand for economic equality in order that these legal doctrines may bear equally upon all becomes a normal social feature.

The case for democracy is built upon the assumption that in its absence men become the tools of others, without available proof that the common good is inherently involved in this relationship. The case at bottom is an ethical one. It postulates that the right to happiness is inherent in man as a member of society and that any system which denies that right cannot be justified. The main argument in its favor is the important one that in any social order where it has not been accepted a rational analysis finds it difficult to justify the distribution of benefits which occurs. Most arguments against it indeed, like those of Plato in the *Republic*, have been less concerned to deny its postulate than to affirm that the end it seeks cannot be attained by the method of democracy. Yet as a rule that criticism has concealed the unstated major premise that the opponents of democracy know better than the common man what is good for him and are prepared to supply him with it. It is this major premise which historic experience seems to refute. It may be, as Rousseau said, that it is the tendency of all governments to degenerate; certainly in no system of government has power been entrusted to a few without subsequent confusion by that oligarchy of its private good with the public welfare; and revolution has frequently been provoked by the inability of the oligarchy imaginatively to meet the wants it has encountered.

Organized democracy is the product of urban life; it is therefore natural that it should have made its first effective appearance in the intense political activity of the Greek city-states. It was of course a limited democracy based on slavery; and in no Greek community did free citizens constitute the majority of the inhabitants. The conditions of its emergence were for the most part economic; at Athens, for example, where the city's wealth was so largely dependent upon overseas trade, a recognition of the importance of the seafaring class in the state was unavoidable. But, generally speaking, democratic ideas did not commend themselves to the major thinkers of Greece. Either, like Plato or Isocrates, their outlook was definitely hostile to democracy or, like Aristotle, they accepted it only with severe limitations. Yet Aristotle recognized the validity of a large part of the democratic case. For him the claim of numbers is vital; he admits that the demand for equality is inescapable; and his analysis of the causes of revolution is nothing so much as a eulogy of the career open to the talents. It is clear enough that his wise and calm mind was impressed by the inherent virtue of a system which without being extreme prevents the undue concentration of power in a few hands. His notion of citizenship too implies a continuous and active interest in affairs of state. His admiration for polity is clearly an acceptance as adequate of at least the foundations of Athenian democracy.

The system broke down largely because the Greek mind never recognized the urgency of pan-Hellenism and partly because the passion for equality at Athens never permitted the creation of an executive strong enough to act vigorously in foreign affairs. Yet internally at least Greek democracy displayed astonishing merits. The life and property of the citizen were generally secure. The importance of order was realized. The sense of civic obligation was high and pride in civic achievement was great. Intolerance did exist, as the classic cases of Socrates and Aristides make clear, and a jealous particularism which, as in the tragedy of Melos, ultimately created a legacy of hate that left Athens helpless before the military genius of Macedon. Yet one of the ultimate lessons of the Athenian democracy is the power of equality to maintain a government of free men.

After the fall of Athens any effective experimentation in democracy ceased until modern times. Rome had a genius for government; but the democratic element in its system was nomi-

nal even in republican times and non-existent in imperial. Military necessity won political equality for the plebeians; but there was no real democratic character in the executive power. The legislative authority of the *comitia* testified to the recognition of the significance of numbers in the state; but this was so hedged about with restrictions as to be but partially effective. The *lex hortensia* of 287 B.C., which nominally made the enactments of the *concilium plebis* binding on the whole people, was important only theoretically. The senate retained the substance of power until authority passed into the hands of the emperors.

Roman democratic ideas are shadowy in a similar way. The Roman stoics show an appreciation of equality. Cicero, Seneca, Gaius and Ulpian are all at pains to establish an original equality of men and to appeal to a law of nature which gives them an equal claim to consideration. But the inference is less political than moral, the duty to be humane rather than the obligation to be democratic. The idea led to legal improvements, especially in the conditions of slaves; but its practical political consequences were not immediately important.

Yet when the stoic idea met and was fused with Christianity it gave birth to a theory of human rights which, had it been applied, would have revolutionized the world in a democratic direction. Early Christian documents insist on the equality of men; they emphasize the idea of property as a trust which must be exercised on behalf of the whole community; and their attitude to slavery contained at least the germs of its overthrow. We must not indeed press any of these elements too far. Because Christianity began as a doctrine of the disinherited, its statesmen, especially St. Paul, insistently emphasized its practical limitations. Their equality was spiritual and not legal. They urged the duty of obedience to constituted authority. They discouraged any attempt to bring out the revolutionary elements implicit in their faith. And once Christianity had been formally adopted as the religion of Rome, the position of the church as a great property owner increasingly anxious for endowment made it an instrument of social conservatism rather than of change. Its importance for democratic theory lay in the future, when it could seem to bring the support of supernatural validity to humble men's claims to a share in the direction of affairs.

Mediaeval conditions contributed ideas of far more practical importance. If the practise of

democracy was largely dead, implicit in mediaeval life were notions important for later theory. At the basis of feudalism lay the idea of contract; and this made universal the assumption that the rights of a lord depend upon the fulfilment of his duties to his tenant. The influence of this was far reaching. It is obviously easy to argue that the king as the supreme overlord owes a duty to his people as the condition of their allegiance; the coronation oath can then be interpreted as a pledge he is not entitled to break. Conflict between various authorities, especially between church and state, then naturally gives rise to the idea of a social compact. So Manegold of Lautenbach, in the struggle between Gregory VII and Henry IV, puts forward an idea of popular right. For him the king must honor divine law, obedience to which is the *pactum* giving validity to his rule. To act unjustly is then to break the compact, and this absolves a people from its allegiance. The theory of course was conceived in the interest of papal authority, and this is true of much of the doctrine which takes a similar view. Where John of Salisbury praises tyrannicide, where Aquinas explains the differing claims of good and evil monarchs, each is in fact discovering an avenue to papal supremacy. But each is also, however imperfectly, insisting that power must be limited in the interest of the governed, and new experience was to make the idea a fruitful one in later times.

Two other mediaeval notions were important. The discovery of the idea of representation solved a problem of governance which baffled classical times. Probably ecclesiastical in origin, it was fully transferred to state affairs by the thirteenth century. Its implications are obvious. If interests are to be represented, of what interests is the representative body (or bodies) to be composed? Phrases come to us like the famous *Quod omnes tangit, ab omnibus approbetur*, which show a sense that the exclusion of an interest may make the representation of a body imperfect; and thinkers like Marsiglio of Padua (with the experience of Italian cities in his mind) and William of Ockham are prepared to press the view to its logical conclusion. They failed practically, but the contribution of the idea of representation to democratic theory was a claim that those excluded from the making of decisions cannot be bound by them. The idea of representation was of seminal importance because it gave those excluded from a share in the organs of government the opportunity of griev-

ance. When social conditions became sufficiently developed this grievance could take the form of a protest against privilege; and in that notion lies the seed of modern democracy.

It is, finally, important that the Middle Ages had no clear conception of sovereignty. The idea of a legally unlimited will was wholly alien to its way of thinking. From the lowest to the highest, men are bound by a hierarchy of laws in which divine law is the summit. This in the long run promoted popular rights by obviously emphasizing the idea of constitutionalism. And the effort to find institutional means for expressing this view may fairly be described as universal. It is the root idea of Magna Carta; it is the essence of Aquinas' insistence on an elective monarchy; it underlies the curious modernity of Marsiglio; it is the basis of the decree *Frequens* of the Council of Constance which sought to put a term to papal autocracy. The absence of sovereignty meant that authority could be regarded as a trust, capable of revocation when it was subject to abuse. The Peasants' Revolt of 1381, the so-called Lancastrian experiment of the fifteenth century, even the Hussite rebellion, all show how deeply that notion had spread. All of them were premature in the sense that conditions as yet made their translation into institutional form impossible. But all of them were vital because they showed how easily they might be utilized for democratic ends in a suitable environment.

Broadly speaking, that suitable environment may be said to have emerged in the sixteenth century when religious schism coincided with economic and geographical change. The synchronism of Protestant creeds with a new capitalist economy was not fortuitous. It gave a new significance to individualism. The fight for toleration in the religious field was paralleled by a fight for freedom of economic and political action. Most reformers were not democratic in any large way, but to establish the right of their faith to exist unhampered they were compelled to attack the absolute state. The sixteenth century is full of discussion of the right to rebel for conscience's sake. Knox and Buchanan in Scotland, Ponet and Christopher Goodman in England, Beza and the author of the *Vindiciae contra tyrannos* in France, are only a few of the outstanding political thinkers of the period who sought ways and means of limiting monarchical authority in the interest of different political sects. Special circumstances forced the Jesuits to defend a curiously similar position; and men

like Mariana and Bellarmine were unconsciously advancing the rights of the people when they sought new weapons in defense of their church.

The sixteenth century for the most part sought to delimit the authority of the prince in the interest of churches. The main impact of the seventeenth century was in England and Holland and consisted in the defense of constitutional government against absolute prerogative. The defense was important because the tendency of the century was all the other way. In Holland it produced in Johannes Althusius a remarkable defender of a liberal federalism in which sovereignty is squarely based upon popular approval. In England civil war and revolution established the principle that Parliament is the essential lawmaking body, and the defense of Parliament was built upon its supposed representative character. The English experience is noteworthy because a revolutionary atmosphere produced among the Levellers extreme democratic views like those of John Lilburne (the true forerunner of Chartism) and extreme democratic communism like that of Gerrard Winstanley. The broad result was summed up in Locke, who gave to the English constitution the peculiar flavor of middle class liberalism it has retained ever since. Kingship became dependent upon Parliament; and we can trace to this epoch the beginnings of the transfer of effective power from the landed aristocracy to the trading bourgeoisie, which was not finally emphasized until the Reform Act of 1832.

France moved more slowly. She had her democratic thinkers in the seventeenth century, notably Claude Joly and Pierre Jurieu, who inferred from the wars of the Fronde and the revocation of the Edict of Nantes respectively that the people should be the effective basis of power. But a serious democratic theory on any considerable scale did not develop in France until the eighteenth century. Then the combination of an inefficient monarchical absolutism with religious bankruptcy and a functionless *noblesse* produced a widespread protest. In some, as with Voltaire and Diderot, the main claim is protection of the individual against the invasion of arbitrary power. Others, like Montesquieu, demand a constitutional system. Others again, like Mably and Morelly, depict communistic utopias as the only effective remedy for social ills. Rousseau sounded a deeper note and denied the legitimacy of all government in which the general will of all the people was not the effective lawmaking power. The *philosophes* did not make

the revolution of 1789; that was the product of misgovernment and bankruptcy. But they made the people aware of their wants. They made a regime of privilege no longer possible, once the Estates General had been convoked. And the French Revolution may be said to have contributed to democratic theory the insistence that the career must be opened to the talents, which was, whatever its limitations, a denial that birth or race or creed can bar the road to equality.

Political thinkers of the nineteenth century differed from their predecessors in that they confronted a condition rather than a theory. They were less concerned to defend an ideal than to discover the fitting means of its operation. Thomas Jefferson in America, Jeremy Bentham and the Mills in England, Alexis de Tocqueville in France, are the outstanding names in a notable procession. There is no common agreement among them upon essential principles. Jefferson, for example, exemplified the faith of the relatively simple agrarian community from which he came. His democratic ideas are those of a man who suspects all exercise of power and seeks above all the fullest means of its control. Bentham's view is that of a lawyer who sees sinister interests at work and finds in liberty of contract and universal suffrage the methods whereby the greatest happiness of the greatest number may be attained. John Stuart Mill saw deeper into the manifold complexities of the problem. But it cannot be said that his demands for full freedom of expression, co-partnership in industry and proportional representation did more than signalize the directions in which events were tending. In many ways the analysis of de Tocqueville is the most outstanding performance of them all. He saw more clearly than anyone else that the inherent principle of democracy is equality and that its consequence must necessarily be the use of the state to minimize the differences between men. In a sense he prophesied the course of legislation in the western world for the following century.

The history of democratic thought has thus centered about two problems—the effort to establish the right of the whole community to share in the direction of the state, and the means of attaining this diffusion of power. The widespread acceptance of the democratic ideal obviously implied acceptance of the possibility that social arrangements were a matter of deliberate human invention. For this three conditions were necessary, and it is in the interrelations of these three that the development of democratic thought

may best be understood. (1) The secular state had to be divorced from the ecclesiastical community. This was effected partly by that complex of causes called the Reformation and partly by the erosion, through scientific discovery, of belief in supernatural sanctions. (2) The feudal notion of social relations had to be replaced by the contractual. This was effected by the commercial revolution which transformed social classes slowly between 1400 and 1750 and with increasing rapidity since that time. (3) Popular ignorance had to be dispelled, partly by the growth of literacy and partly by the evolution of a consciousness of power in the masses which would enable them to know both what they wanted and how to organize for its attainment. Largely this was the outcome of nineteenth century development. Popular education slowly achieved the first, and economic organization, especially in the form of trade unionism, did most to secure the second.

The struggle for the attainment of democratic institutions has taken forms as various as the conditions it encountered. The eighteenth century popularized three ideas. English experience led to the belief that parliamentary government is the parent of civil liberty. The American Revolution made popular the notion that a discontented people has the right to cashier its governors. The French Revolution established the principle that autocracy is the necessary parent of special privilege. Nineteenth century democrats attempted to find institutional expression for these ideas. And the stress of a new and intensified system of production, in which rapidly increasing and concentrated populations had to be satisfied, necessarily increased the rate of progress toward democratic institutions.

Sometimes the demand was for the establishment of representative institutions, as in Germany; sometimes for the extension of the franchise. In the first part of the century the English system became the model for peoples struggling to be free. In its latter years Swiss democracy became the fashion; the representative system was criticized as leaving the member of Parliament the master of the electorate between elections. This led to an enthusiasm, most notable in western America, for direct government; and every constitution sought to embody the initiative, the referendum and the recall as the necessary safeguards of a democratic state. America indeed specialized in experiment in technique. The short ballot, the recall of judges, the direct primary, all were at one time or another urged

as seminal contributions to the problem of discovering appropriate forms. At one time the question of a second chamber aroused wide interest. At another proportional representation was put forward as the highroad to salvation.

The importance of machinery has been emphasized by another factor. A state which numbers its population by millions cannot decide upon its purposes without government by parties. "Party organization," as Bagehot said, "is the vital principle of representative government." Without the party system in some form it is impossible to get that concentration of voters for decision which is essential with electorates of the modern size. But parties, inevitable as they are, have brought in their train a host of complex problems. The method of choosing candidates, the proper size of a constituency, the prevention of corruption, the exact powers which an elected member should exert, the representation of minorities, these are only the outstanding issues for which suitable machinery has to be devised. And, broadly speaking, it may be said that the experience of party government in the last seventy or eighty years has rendered obsolete most of the simpler views of democratic government. Bentham could urge that universal suffrage would prevent the emergence of sinister interests; no one thinks so now. The Chartists could insist that the ballot and annual parliaments would enable the popular will to find its way to the statute book; it is now clearly seen that they greatly oversimplified the problem. As Halifax said some two hundred and fifty years ago, "the best kind of party is in some sort a conspiracy against the nation." In this context questions of electoral machinery become urgent if the end of democracy is to be attained. And it cannot as yet be said that their satisfactory solution is in sight.

Ever since the French Revolution there has been a close connection between democracy and nationalism. The attainment of unity involved the conquest by the nation of the panoply of the sovereign state, and the step thence to empire was a small one. Now empire for the most part meant the control of colored peoples by the white race—the Philippines by America, India by Great Britain, Java by Holland, Indo-China by France. With the close of the nineteenth century came a democratic awakening which infected not merely colonial territories of this kind but also ancient empires like China. The main proponents of democratic theory had for the most part taken the younger Mill's view

that the idea of democratic government suited only the habits of advanced and, essentially, white peoples. Its adaptation to non-white civilizations was fiercely resented. It meant the surrender of political power by the whites and often of an economic dominion based on political control. Great Britain, for instance, might yield control gracefully enough in Canada, South Africa or Australia; its surrender in India was a different matter. For the withdrawal of control meant the possible jeopardy of great interests built up on the faith of its continuance. It disintegrated economic and political habits to which great importance had become attached. It challenged, at least contingently, that domination of the world by the white man which to most nineteenth century thinkers had been almost an unconscious axiom. It would not be unfair to say that most democratic thinkers found it difficult to apply their philosophy to people of a different color. The latter in their turn found the postulates of the democratic creed unanswerable. Great Britain, for instance, found herself in the dilemma either of granting to India institutions for which she believed it to be dubiously suited or of attempting to suppress demands which could only be resisted with naked force. To use such force meant not only to divide her own public opinion; it meant also to threaten her own economic well-being in India. *Mutatis mutandis*, the situation was true elsewhere; and the question was posed to the twentieth century whether democracy and empire are compatible at all and if they are whether the compatibility does not mean sooner or later the abandonment of effective control by the suzerain of its authority over its dominions. Turgot's maxim that colonies are like fruit upon a tree which falls as it ripens seemed to summarize the general history of this relationship; and the democratic notion hastened the proof of its universality.

Democratic government during the nineteenth century may be said to have been successful so long as it confined its activities to the purely political field. While it occupied itself with matters of religious freedom, formal political equality, the abrogation of aristocratic privilege, its conquests were swift and triumphant. But the attainment of these ends did not solve any of the major social and economic issues. The masses still remained poor; a small number of rich men still exercised a predominant influence in the state. With the grant of the franchise to the workers therefore a movement toward col-

lectivism was inevitable. Political parties had to attract their support; the obvious method was to offer the prospect of social and economic legislation which should alleviate the workers' condition. And from the early days of the French Revolution there had appeared the portent of socialism with its insistence that only in the rigorous democratization of economic power could a solution to the social problem be found. Incoherent at first, the development of trade unions and the growth of doctrines like that of Marx made what seemed visionary utopianism into a movement. By the eighties of the nineteenth century socialism could represent itself as the natural and logical outcome of democratic theory. It could outbid the older parties on ground which universal suffrage had made the inevitable territory of conflict. In the opening years of the twentieth century the central theme of debate had become the power of the state to satisfy the economic wants of the working class.

The war supervened to give this new evolution the sharpest possible definition. No democratic system met its challenge effectively. Openly or covertly every belligerent state organized itself for war in terms of a more or less extensive dictatorship. The questions were asked whether democracy had that inherent efficiency necessary to cope with its problems, whether the social question could be solved through the forms of classic democracy, whether disparities so vast as those revealed in the most advanced society could be bridged in terms of peaceful evolution. The conquest of Russia by Marxian socialism brought to power a body of men for whom political democracy was an unedifying mirage. They insisted that the democratic state merely means the dictatorship of the capitalist; that he would never peacefully yield his power; that it must accordingly be taken from him by a revolution in which the working classes would, through the dictatorship of the proletariat, seize the state and control the means of production in the interest of the masses. Democracy for them was an ideal incapable of realization until the power of property had been overthrown. It was only when men were economically equal through the successful socialization of the means of production that a thoroughgoing dictatorship could be abandoned.

In the feverish post-war atmosphere the dramatic Russian experiment exercised a wide fascination, and its communist theory became the most complete challenge to the democratic prin-

ciple since the French Revolution. Attempts to imitate it were frequent, notably in Hungary and Germany. Inevitably also it produced its antithesis, expressed in various forms, of which perhaps the most striking is the Fascist dictatorship in Italy. But underlying them all is a common philosophy based on the rejection of all democratic principles as involving an anarchy incompatible with the vigorous organization required by the state. These principles, it is claimed, destroy the unity of the state. They dissipate in discussion the energy which is needed for action. Parliaments are overwhelmed with work so that rapidity of action is impossible for them. The average man is too incompetent and uninterested in the issues which must be decided to have an effective opinion about them. The technicality of modern problems means government by the expert; and democratic methods are held to be irrelevant to his decisions.

Many factors have contributed to this outlook. The fractionalization of parties, as in France and Italy, the habits of violence engendered everywhere by the war, the new intensity of nationalist faith, the failure to adapt democratic political procedure to new conditions, the gravity of the economic crisis in the post-war period, are all causes of importance. But the underlying principle of Fascism is pretty clearly the defense of the power of the middle class against the onslaught of the masses. It is the outcome of the realization that the trend of democracy is to fasten an increasingly heavy economic burden upon the comfortable; and the dictatorship it establishes is a deliberate effort to mitigate this condition. How far it is likely to be permanent no one can say. The ability of democracy to survive the dual attack of communism and Fascism will obviously depend upon its ability to adapt its mechanisms and principles to a changed world.

Not indeed that the protagonists of democracy are unaware of the malaise. The last twenty years have seen a notable change in its perspective. In the years before the war attention was mainly devoted to questions of machinery like the referendum and the recall; and the post-war constitutions, especially those of the new European states, showed a curious enthusiasm for mechanical devices intended to give the electorate its maximum authority.

But since the war the theory of democracy has far outstripped its practise. Few thinkers now interpret its problems in Benthamite terms. The notion that political equality will give birth

to liberty in its different aspects is nowhere widely held. While there still remain, especially in England, men to whom the adoption of proportional representation remains the major political reform, continental experience of its operation has everywhere dimmed its attractions. The major currents of democratic theory set in other directions. Their emphasis now is upon equality of economic opportunity. This involves the insistence that social income must definitely be used to prevent undue disparity between man and man in all the major activities upon which the good life depends; and the state appears as the institution which deliberately uses the taxing power to achieve this purpose. The good life is unattainable where there are wide economic disparities between classes.

From this further consequences flow. If the hypothesis of self-government is valid in the political sphere it must be valid in the economic sphere also; whence is born the insistence upon constitutional government in industry. Not only must the state interfere to this end in the general details of economic life, but it cannot realize its end if the operation of the profit making motive is admitted in any industry of basic importance to the community. The new ideals of democracy therefore foreshadow a functional society in which the older conception of liberty of contract has no place. Any state in which the economic sphere is left largely uncontrolled is necessarily a class society tilted to the advantage of the rich; it lacks that necessary basis of unity which enables men to compose their differences in peace. The claim for the sovereignty of the state no longer rests upon the strong basis provided by the old liberal hypothesis of a society equal in fact because formally equal in political power. Largely the new democratic theory accepts a quasi-Marxian interpretation of the state while refusing to draw therefrom the inference that revolution is its only satisfactory corrective.

But in order to achieve a functional society in effective terms the new democratic theory calls for a thorough overhauling of existing institutions, particularly on the political side. Here we can only suggest in brief outline the direction of its thought. (1) It is hostile to the idea of the national state as the final or chief unit in social organization. The economic interdependence of the modern world makes it regard the state as essentially a province of an international society to which alone in ultimate matters essential authority can belong. (2) It regards the classic theories of parliamentary and presidential gov-

ernment as unsatisfactory. They represent a response to the social conditions of the nineteenth century rather than of our own day. The basis upon which it demands revision is threefold: (a) it looks to a large measure of territorial decentralization; proper areas of local authority must not be unduly fettered by central control; (b) it looks to a large measure of economic federalism; for it the cotton industry and mining are entities of government as real as Lancashire or New York, which need their own inherent organs of constitutional government; (c) it desires reorganization of central government in order to associate with the making of decisions all interests which are likely to be affected by them. Its view therefore of the institutional structure of the twentieth century is of a pattern far more complex than was envisaged by men like Jefferson or Bentham or Mill. It does not believe that this institutional reconstruction can be postponed in either the international or the national sphere if democracy is to be made capable of effective realization.

At the base of this view is clearly the old democratic notion that the only way to respond to the wants of the individual is to associate him with the process of authority. It accepts therefore the old claim that exclusion from a share in power is also exclusion from a share in benefit. It regards the right of men to share in the results of social life as broadly equal; and it regards differences of treatment as justifiable only in so far as they can be shown to be directly relevant to the common good. It takes its stand firmly on the need for a close economic equality on the ground that the benefits a man can obtain from the social process are, at least approximately and in general, a function of his power of effective demand, which in turn depends upon the property he owns. It is thus hostile to all economic privilege as being in its nature fatal to the end at which a democratic society must aim. For the new democratic theory liberty is necessarily a function of equality.

And it therefore seeks the institutions appropriate to an egalitarian society. That is why it refuses to confine the ideal of democracy to the purely political sphere. It believes that for the average man constitutional government is not less important in industry than in politics or any other sphere. What Michel called the "eminent dignity of human personality" cannot in its view be protected upon any other terms. The essence of democracy on this hypothesis is full consultation before decision; and the discovery

of the organs which will make that consultation effective is therefore of paramount importance. On such a view also the central government, in the ordinary meaning of the term, has less than the importance attributed to it in previous theories. It becomes a final method of coordination rather than an originating source of command. Society is transformed into a system of centers of authority, each of which is urgent and significant, rather than into a pyramid in which the central legislative assembly accretes all power to itself. This theory is incompatible with the classic view of parliamentary sovereignty; it tends much more to the notion of spheres of competence laid down by a constitution which is supreme over the bodies dependent upon its authority.

The new trend of democracy is not less hostile to dictatorship in any form than the old. Whatever the original purpose of dictatorship, history indicates that it cannot avoid degeneration; and when that occurs the benefits of the dictatorship are bound to be confined to those who share in its operation. Further, modern democratic theory is built upon the notion that the only way of responding to the wants of total experience in modern communities is to give that experience the full opportunity of expression; and the only way to give it that freedom is to offer it in its various aspects the responsibility of sharing in power.

One final remark may be made. It is not the view of modern democratic theory that a political man can be constructed whose interest in the public business of the community is assured. It does believe that increased educational opportunity will increase that interest; a belief which further emphasizes the need for equality. It does argue further that the main result of inequality is so to depress the moral character of those at the basis of the social pyramid as to minimize their power to get attention for their experience. Again therefore it sees in equality the path to the end democracy seeks to serve. It has far less assurance than in the past that the end may be attained, but it is not less convinced than its predecessors of the nobility of the ideal.

HAROLD J. LASKI

See: EQUALITY; LIBERTY; INDIVIDUALISM; LIBERALISM; NATIONALISM; SOCIALISM; GOVERNMENT; SOVEREIGNTY; NATURAL RIGHTS; SOCIAL CONTRACT; REPRESENTATIVE GOVERNMENT; SUFFRAGE; PARTIES, POLITICAL; POWER, POLITICAL; INTERESTS; ARISTOCRACY; DICTATORSHIP; COMMUNISM; FASCISM; PLURALISM.

Consult: FOR HISTORY OF DEMOCRATIC INSTITUTIONS

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DEMOCRATIC PARTIES. See PARTIES, POLITICAL, sections for separate countries.

DEMOGRAPHY. The term demography is best established in France and Italy. The Germans and Scandinavians make slight use of it, and it has never attained to general usage in the English speaking countries. Internationally, however, the term has secure standing in the international congresses of hygiene and demography and the International Statistical Institute. It was first used by Achille Guillard in his *Éléments de statistique humaine ou démographie comparée* (Paris 1855), who regarded it as the mathematical knowledge of the general movements and of the physical, social, intellectual and moral conditions of populations, or still more broadly as the natural and social history of the human species. Levasseur defines it simply as the science of population, a science which ascertains the state and studies the movements—chiefly births, deaths, marriages and migrations—of population and which endeavors to discover the laws which control these movements. Such a definition on the one hand suggests the historical evolution of demography from the political arithmetic of Graunt, Petty and Süssmilch and on the other its near relationship to modern vital statistics. In fact, Whipple regards demography as in a narrow sense synonymous with vital statistics, but also states that broadly it is “the statistical study of human life” and includes not only census and other data on the state of the population and the population movements usually recorded and analyzed in vital statistics but also genealogy, eugenics, anthropometry and statistical pathology. Such broad inclusion of content as that indicated in the latter definition should be avoided. On the other hand, demography should be defined to comprise more than vital statistics. The study of the latter, properly delimited, is concerned with the movement of population (*mouvement de la population*, *Bevölkerungsbewegung*) as revealed in the statistics of birth, marriage, divorce and death and is concerned with the state of the population (*état de la population*, *Bevölkerungsstand*) only to the extent that statistics of the state of the population afford basic data for the study of the vital movements. Despite the objection of von Mayr in his *Bevölkerungsstatistik* (Freiburg 1897) that the term is redundant if used as synonymous with population statistics, demography may be defined as the numerical analysis of the state and movement of human population inclusive of census enumeration and registration of vital processes and of whatever quantitative statistical analysis can be made of

commit acts of violence to pave the way for injunctions, police attacks of workers and the creation of a public opinion unfavorable to the strike or the union. The history of American labor struggles gives many instances of detective agency violence. Noteworthy cases are on record in which detectives have resorted to assault, dynamiting, bomb and acid throwing, raids on strike relief stores, murder and other acts of repression and provocation. An agency has been known even to start strike agitation or to incite some form of violent outbreak of workers to secure a contract with a prospective client.

One method of destroying union morale is to bribe union leaders and to entice them to the pay roll of the agency. Many labor leaders in the United States tell of having been offered bribes by agencies acting for employers and corporations. Some leaders have in this way become the secret employees of agencies to which they report regularly.

Certain private detective agencies have offered special services in securing information on the operations, and in preparing blacklists of members, of radical political groups such as the Communist party and related organizations. Professional patriotic societies have employed such agencies for antiradical spying.

Most agencies have been organized and are staffed by ex-policemen and secret service men, and heads of the larger agencies have held the highest detective jobs with the federal government. Such men have at times used their official positions to advance their own interests. A former head of the Bureau of Investigation of the Department of Justice, for example, used government stationery on an antilabor investigation undertaken by his agency for a private client. Some agencies with political and underworld connections have refused to testify as to their activities before grand juries investigating thefts. Their intimacy with police officials and other persons of authority often places them beyond the reach of prosecution for crimes they have committed.

Various legislation has been passed or proposed to curb private detective agencies, especially in their antilabor activities. In twenty states private detective agencies are licensed by law. Each must pay a fee and put up a small bond. Operatives of such agencies are not usually required to have a license. In 1925 the state of Wisconsin passed a law requiring the registration and bonding of all "inside shop operatives." Although this law has somewhat

curbed industrial espionage in Wisconsin it has by no means put an end to the practise. While compelled in some instances to shift their licensed business offices to cities in adjacent states the agencies have continued their anti-union espionage in Wisconsin. Attempts by unions and progressive political groups to pass similar legislation in other states have been defeated. The complete abolition of private agencies, the raising of standards of vouched reliability and financial bonding for operatives, stricter licensing laws, federal licensing of all agencies engaged in interstate business, especially the transportation of labor undercover men, armed guards and strike breakers, have been proposed. In 1915 the Industrial Relations Commission urged congressional statutes regulating or prohibiting agencies and similar organizations. It urged the complete assumption of police duties by the states and municipalities and the prohibition of private detective agency police. None of these measures has been passed. Bills calling for the investigation of the acts of the agencies have been fought by the agencies and the industrial interests which use them.

Some private detective agencies exist in Europe, where they are active chiefly in divorce and business spying. Most European governments use official police detectives for espionage against working class and radical movements, and hence the private industrial spy and private detective espionage in trade unions are virtually unknown in Europe.

ROBERT W. DUNN

See: ESPIONAGE; POLICE; BLACKLIST, LABOR; LABOR DISPUTES; CRIME; CRIMINAL LAW; CIVIL LIBERTIES. *Consult:* Howard, Sidney, and Dunn, Robert, *The Labor Spy* (New York 1924); Dunn, Robert W., *The Americanization of Labor* (New York 1927) ch. v; Hunter, Robert, *Violence and the Labor Movement* (New York 1914); Friedman, Morris, *The Pinkerton Labor Spy* (New York 1907); United States, Commission on Industrial Relations, *Final Report* (1915); Interchurch World Movement, Commission of Inquiry, *Public Opinion and the Steel Strike* (New York 1921); Palmer, Frank L., *Spies in Steel* (Denver 1928); Spielman, J. E., *The Stool Pigeon and the Open Shop Movement* (Minneapolis 1923); Siringo, Charles A., *Two Evil Isms* (Chicago 1915); Wagar, L. H., *Confessions of a Spotter* (St. Louis 1918); Beet, Thomas, "Methods of American Private Detective Agencies" in *Appleton's Magazine*, vol. viii (1906) 439-45; *Professional Patriots*, ed. by Norman Hapgood (New York 1927).

DETERMINISM in one form or another is the theoretical presupposition of all intelligent social activity. No social regulation could be under-

taken without the assumption that human behavior is largely influenced by certain factors revealed through a consideration of man's past. Reflection upon the extent to which we can rely on our neighbor's behavior indicates that a complete denial of determinism can be only an academic indulgence. It would make of all social existence and control an ever renewed miracle. When professed such denial means either a refusal to accept some particular definition of determinism or disbelief in its universality or an unwillingness to carry over some special type of determinism from one domain of experience to another.

Primitive man's mythology and religious practises express in large measure his desire to understand and control the exceptional occurrences in his environment. The attempt to formulate a theory of universal causation, however, comes rather late in human history. But as early as antique Greece there existed side by side the three generic theories which have dominated the history of European thought. One was the idea of fate, central to Greek drama and religion, a conception of the world order in terms of absolute decrees that fulfil themselves independently of natural mechanism or moral intent. It was a primitive form of cosmic predestination, dramatically conceived. In eschatological dress it reappears in the theological determinism of St. Augustine, Dante, Vico and Bossuet. The second, found in the philosophies of Plato and Aristotle, conceives the world order as a moral order. Things are defined in terms of their ends and purposes, which are organized hierarchically and are active in the process of world history. In the later forms of this teleological determinism, as represented by Hegel, Herder, Ranke, history is conceived as the autobiography of ideas or spirit. Finally, in the Ionic philosophies, and more definitely in Democritus of Abdera, we have the beginnings of scientific determinism. All occurrences are regarded as expressions of certain invariant principles indifferent to the needs of men and the will of God. The idea of an intelligible "order of nature," self-contained and transcendent—the source of all man is and the condition of all he can be—emerges as the guiding principle of scientific inquiry. In the sixteenth and seventeenth centuries, when the detailed characters of the "book of nature" were read by Galileo, Kepler and Newton, such scientific determinism became glorified as the method of all inquiry. In the eighteenth and nineteenth

centuries this conception of natural order and the methods used for its investigation became the model for such attempts to analyze the social order as those of Saint-Simon, Comte, Spencer and Schäffle.

A system is said to be determined when there are relations between any state of the system and certain elements, $e_1, e_2 \dots e_n$, such that, given the elements at time t , the state of the system at any other time t_1 can be inferred. It should be carefully noted that there is nothing in a determined system which makes it necessary that the relationships discovered to hold between any state of the system and $e_1, e_2 \dots e_n$ recur or endure forever. The common notion that in the proposition "if a occurs then b will follow" b must follow confuses logical determination with existential connection. The long continued association of a and b gives us a right only to a probable judgment about their further association. This probability is not merely a measure of our ignorance. To say that were we to know enough about the state of a system at any moment we should know everything about its future states is to utter a deceptive tautology, for it overlooks the fact that to know enough of a system we should already have to know everything about it. And obviously to know everything about a system the world would have to be over and done with, in which case the maxim would be useless since there would be no future to which it could be applied. So long, then, as the future event predicted has not happened there is a genuine contingency involved in its occurrence. We discount this contingency by erecting the invariance of law into a postulate of scientific inquiry, and a postulate, as Peirce said, is no more than "something we hope to be true."

Another contingent factor in every deterministic system is the point at which the system intersects with another system. The death of x , say, may be determined; but the exact place, time and occasion of his death is a matter of "relative accident." To say that anything is "relatively accidental" does not mean that it is uncaused but merely that it is not deducible from the data of the original system. For example, the breakdown of the rice economy in Japan was determined by the preceding social development; the visit of Commodore Perry by certain political considerations. The conjunction of both was relatively accidental. One event could not have been deduced from the other nor both from a third.

Finally, to say that a system is determined does not of itself tell us how it is determined. The specific terms or categories which are taken as determinants (particles of matter in motion, organic stimuli or ideal motives) cannot be inferred from the general fact that a system is determined. A system may be determined in several ways but not in the same respect. Failure to realize this is behind the many attempts to reduce all phenomena to variants of one special type of determinism.

In the physical sciences there has been considerable unanimity as to how the principle of determinism should be stated and the nature of the fundamental categories involved. In the social sciences, however, not only has there been no unanimity about the character of social causation but the very relevance of causal analysis of cultural phenomena has been denied, e.g. by Windelband and Rickert.

Those who believe that social phenomena can be scientifically investigated fall into two main divisions. One group maintains that whatever is socially determined is merely a complex function of the simply determined processes studied in the natural sciences. Whether this school calls itself mechanical, energetic, biological or psychological, its methodology is the same. Sometimes it is accompanied by a skepticism concerning the material possibility of social science because of the complexity of the subject matter. Other theorists, among them Marx, Durkheim, Simmel and Weber, maintain that social determinism is not reducible to the simpler forms of scientific determinism but has an autonomous character of its own with specific explanatory characters derived from the social activity of man. It uses the causal relations established by the physical sciences as elements in its own explanation but insists that in such cases the character of the explanation differs from the character of the elements.

Theological determinism is an exceptional type of deterministic theory. According to this doctrine whatever happens has been determined by God's will (sometimes read as fortune, fate or providence). It is indistinguishable from fatalism whenever it fails to specify how God's will works. This does not prevent those who profess it from putting lightning rods on church steeples. It survives in the writings of those who still see the finger of God in history. Nothing can possibly refute it, for it can always reinterpret the findings of experimental science. Since it can speak only *after* the event its wisdom

is of an easy *post hoc, ergo propter hoc* variety. Consequently, even as a postulate it is useless.

Physical determinism is an attempt to explain social phenomena primarily in terms of the categories of natural science. Sometimes the movements of material particles in space and time are taken as fundamental, as by A. P. Weiss; sometimes the dissipation of energy, as by Brooks and Henry Adams and by Ostwald; sometimes the processes of biochemistry, as by Lotka. The resultant "social physics" is then regarded as a complicated chapter in mechanics, thermodynamics, biochemistry, etc. The chief objections to this type of determinism are: (1) In explaining all phenomena in terms of one set of categories the specific and differentiating characters of social phenomena disappear. (2) Theoretically it is impossible to derive those features of qualitative novelty which practise compels us to recognize on different behavior levels. (3) As a consequence either such phenomena as feeling, will and purpose are denied, resulting in crude mechanistic materialism, as in Büchner; or in order to explain their existence they are read back as potentially present in all natural processes from the very start, resulting in metaphysical spiritualism, as in Fechner.

Geographic determinism, under which we may include all theories which emphasize climate, soil or food as determining factors of social development, traces the character of any culture and the changes within it to some relevant element of the physical environment. These interpretations follow the fortunes of the physical sciences. Valuable monograph work has been done in correlating certain social phenomena, such as suicide and marriage, with climate and fertility of soil. But the general claims made by theorists of this school from Buckle to Huntington are extremely speculative. Their chief difficulties are: (1) A confusion between necessary conditions of cultural activity and sufficient conditions. It is true to say that unless woods contained game there could be no hunting. But that does not mean that a people hunts because a wood is rich in game, for many tribes under such conditions live on vegetables. (2) They resort to problematic long distance influences exercised by the geographical environment upon factors which are apparently stable, such as race. (3) They minimize the significance of cultural diversity where the geographical environment is similar and of cultural similarity where geographical conditions are diverse.

Racial and biological determinism assign to a racial or to some other hereditary trait the status of an independent variable in the history and organization of society. The theory suffers from the same logical difficulties as do other monistic determinisms and, as expounded by its most influential representatives, Gobineau, Chamberlain and Pearson, from others as well. The fundamental concepts of race and native intelligence are seldom precisely defined. Value terms expressing subjective preferences creep into the use of epithets like superior and inferior. It cannot be too strongly emphasized that the influence of racial and other hereditary characters is never observable directly, since these traits are found existing in some specific cultural environment. Judgment as to the relative weight of innate capacity is consequently an inference based on the different rates and qualities of cultural achievement displayed by different groups in the course of history. But in order that the inference be valid we must show that in respect to environment, training and other relevant circumstances conditions were similar. This has obviously not always been the case. Hence all judgments about inherent racial capacities must be received with great caution.

Psychological determinism takes two generic forms. It is sometimes an attempt to explain social behavior primarily in terms of certain unconditioned responses (Thorndike's innate tendencies, W. McDougall's instincts, Freud's libido). All the objections urged against the other varieties of determinism apply to these schools. The opposite psychological standpoint is defended by the behaviorists, led by Watson. All social behavior is construed in terms of conditioned responses built up under the sole influence of the environment. This view assumes almost complete psychological plasticity on the part of the individual. It has even less experimental justification than the view it opposes. Both varieties of psychological determinism fail to do justice to the logical nature of meaning and to the historical character of culture. In addition, the first fails to explain the different expressions of instincts assumed to be constant; the second, the widely divergent responses on the part of different individuals who have been developed in similar environments.

Social determinism embraces all theories which seek to explain the structure and development of culture in terms of man's social environment. It is clear that the social environment as a whole cannot be regarded as the proximate cause

of any specific event. Nor is the tautology that the whole social environment at time t is the cause of the whole social environment at time t_1 any more enlightening. Consequently, it is always some element or series of elements in the social environment which is regarded as the key factor to cultural change. This may be the mode of economic production, as in Marx, or the system of jurial relations, as in Stammer, or the forms of religion, as in Weber, or some combination of these with others.

Every form of social determinism implies that cultures are morphologically determined. Before attempting to explain the nature of cultural change it must therefore first reconstruct the structural pattern of a given culture complex. By using the logic of the part-whole relation it must reveal the intimate ways in which different cultural activities—ideas, institutions, habits—dovetail with one another. For example, in discussing Greek culture it attempts to lay bare the thread of organic unity which connects Greek religion with Greek art, philosophy, occupational activity and political history. Or in approaching feudal culture it reveals how such apparently unrelated things as a mediaeval cathedral, the realistic theory of universals, the principles of canon law and the system of land tenure are organically involved in one another and are not at all accidental conjunctions of independent cultural elements.

But culture is not only a structurally interrelated whole. It is a developing whole. Consequently, the results of morphological analysis only set the proper tasks of social theory. These are: What elements or combination of elements constitute the dynamic factors (independent variables) in social change? What is their comparative strength? What the resultant rate of change? Due to the enormous complexity of the elements involved, the difficulty of experimental control and the absence of a theory of measurement no body of detailed objective results has emerged comparable in any way to the achievements of other sciences. But perhaps the chief obstacle to the development of a scientific theory of social change has been the use of a crude, monistic theory of causation. Some single factor has been isolated and all other cultural changes simply explained in terms of its changes. This has often led to a disregard of the facts of reciprocity and interaction between social factors, to an attempt to call the reality of cultural effects into question (social epiphenomenalism; for example, the effective

role of ideals in history is sometimes denied because they are causally conditioned by some material factor) and to a quest for remote ultimate causes of events instead of their proximate causes.

The substitution of a functional conception of causation for a simple monistic theory of cause and effect is a safeguard from errors of this kind. Under the influence of positivist thinkers like Mach, Avenarius and Verworn, the tendency today is no longer to lay down flat unverifiable statements, for instance, that religion is the "primary" or "basic" or "most important" cause of cultural change. The relationship is expressed in terms of function, dependent and independent variables. If religion is selected as the independent variable, then we try to discover the definite ways in which other aspects of culture, for instance, the legal, vary with changes in religious conceptions [symbolically, $l=f(r)$]. But there is no logical compulsion to take religion as the independent variable. We could have taken art or politics or economics as independent variables and traced the functional dependence of law upon them [getting a whole series of relationships, $l=f_1(a)$; $l=f_2(p)$; $l=f_3(e)$]. Or we could have reversed the original function, taken law as the independent variable and shown how religion varies with its changes [$r=f_4(l)$]. Strictly speaking, neither the one nor the other member of the functional equation can be called cause or effect. Theoretically there is no limit to the number of functional correlations which may be so established nor to the complexity of such correlations. For we might take the functional relationship between any two variables, say religion and law, and try to show that the change in the function which relates the two is itself a function of some third variable, say economics [symbolically, $l=f(r)$ or $F(r, l)=0$; but it may be that $F=\phi(e)$]. What, then, determines the specific functional relations for which we are to seek?

This last question indicates that the quest for direct causes is not incompatible with the establishment of functional dependences in the social sciences. The reason we seek to establish one set of correlations rather than another can be found only in the assumption of some hypothetical causal connection between the elements so related. In many instances we disregard the presence of high positive correlations between two phenomena because we do not believe we have evidence of significant connection. Why is it that we take the positive functional correla-

tions established between the business cycle and tuberculosis as more probably indicating relevant connection than the even higher positive correlations between the business cycle and cancer? The question of causal agency is not at all academic; since for purposes of social control we must know which element in the functional relation must be changed. The element which must be changed we regard as the cause. The relevance of one element to another in a culture complex can never, then, be ascertained merely by a functional correlation, for the obvious reason that an antecedent hypothesis as to relevant causal connection must guide the search for correlations.

The functional theory of causation together with all the apparatus of statistical inquiry is invaluable in accumulating data to be interpreted. It can also establish the irrelevance of any two elements in the social environment assumed to be causally connected. Of itself, however, it cannot offer an explanation of the correlations found. Only some causal theory can do that. Such a theory will be, as we have seen, pluralistic rather than monistic. Its chief problem is to develop a theory of measurement to determine the relative weight of the various causal factors considered.

SIDNEY HOOK

See: PHILOSOPHY; SCIENCE; METHOD, SCIENTIFIC; MECHANISM AND VITALISM; MATERIALISM; ENVIRONMENT; HEREDITY; RACE; EVOLUTION; EVOLUTION, SOCIAL; SOCIAL PROCESS; CHANGE, SOCIAL; FATALISM.

Consult: Brunschvicg, L., *L'expérience humaine et la causalité physique* (Paris 1922); Rickert, H., *Die Grenzen der naturwissenschaftlichen Begriffsbildung* (5th ed. Tübingen 1929); Flint, R., *Historical Philosophy in France and French Belgium and Switzerland* (Edinburgh 1894); Barth, P., *Die Philosophie der Geschichte als Soziologie* (4th ed. Leipsic 1922); Stammler, R., *Wirtschaft und Recht nach der materialistischen Geschichtsauffassung* (5th ed. Berlin 1924); Troeltsch, E., "Der Historismus und seine Probleme" in *Gesammelte Schriften*, 4 vols. (Tübingen 1919-25) vol. iii; Weber, Max, *Gesammelte Aufsätze zur Wissenschaftslehre* (Tübingen 1922); Durkheim, É., *Les règles de la méthode sociologique* (Paris 1895); Brinkmann, C., *Gesellschaftslehre*, *Enzyklopädie der Rechts- und Staatswissenschaft*, vol. xlviii (Berlin 1925).

DEVALUATION is a term applied to a series of legislative enactments by which a new legal value is assigned to a depreciated monetary unit and a new settlement is decreed for all contracts in monetary terms. Generally devaluation involves a reduction of the bullion content of the monetary unit in order to assure approxi-

the acquisition of wealth. In his analysis of the quantity theory of money he emphasized, before Cantillon, the importance of the factor of velocity of circulation. In his theory of credit he stressed the importance of paper money and looked upon credit as a genuine source of the increase of wealth, as a direct agent of production. Dutot may be considered a forerunner of the physiocrats, for he greatly emphasized the importance of rural wealth. Mention should also be made of his ideas on colonial trade and of his fiscal theories, which advocated the apportionment of taxes on the basis of the ability of the individual to pay.

ROGER PICARD

Consult: Valéry, Lucien, Les idées économiques de Dutot (Ligugé 1920).

DUTY. The concept of duty represents the most general acknowledgment of the dominance of the social environment upon the individual. The common name for this dominance is conscience. If one seeks the major significance of this term he will be led logically into a survey of the variety of things which have been supposed to be known as moral, into the variety of implications carried by the notion of duty.

The first reference of the term, if not also the most basic, derives from religion. To do one's duty is to obey the will of God as revealed through conscience. The jural implication of such an orientation of duty is easily seen in the fact that if one's conscience does not function to reveal what the ascendant voices of the time and place call the will of God he has his duty to do nevertheless. For constituted authority borrows prestige as the manifestation of the divine will for those who acknowledge the latter, and is made to serve as its substitute for those who do not acknowledge such sovereignty or who though acknowledging it have nevertheless found their direct channels of communication with it obstructed. And if a little "gentle violence," as Plato has it, must be used to get acknowledgment of the human substitute from those who have sacrificed fresh access to the celestial essence, it is to be easily overlooked in the interest of a larger totality of good. A famous expression of this universal indirection is John Cotton's reply to Roger Williams' complaint that he had been driven out of Massachusetts for following his conscience: not because you followed your conscience, ran Cotton's retort, but because you refused to follow your conscience in doing what you knew

to be right. Thomas Hobbes' more ingenious proof from the derivation of the word that conscience cannot be private but must be publicly in the hands of the sovereign (*Leviathan* ch. vii) exemplifies the same motif from a less theological but no less authoritarian angle. The theological interpretation recognizes an objective basis for duty and shows a wise clairvoyance for the social nature of this basis by dramatizing the source into a transcendent personality, whose voice is the soul's own portable oracle.

A little less innocence or a little more honesty, and the voice as content for duty gives way to principles that may be read at leisure by the dutiful. These may themselves take the form of intuitions impressed upon the soul and revealed by appropriate experience, as in the doctrine of innate moral ideas or in the Kantian categorical imperative. Or they may be "laws of nature" to be discovered through research and acknowledged as and when found. The stoic formula, "live according to nature," located the source of duty in a natural order, characterized the emotions as obstacles to its practise and regarded the continuous function of reason as the means to its discovery. Plato's doctrine of reminiscence, in so far as it was an ethical doctrine, mediated the anthropomorphic religious view of duty and the subsequent stoic impersonal interpretation of it. Conscience gave place to reason as the moral organ, and an active attitude began to supplant a typically passive one toward the problem of finding out what ought to be done. Socrates illustrates both attitudes, characteristically pursuing the moral argument wherever it leads him and yet at crucial times standing immobile for hours listening raptly to his "voice" telling him "what not to do."

The ambiguity of the concept "nature," as used by both stoics and moderns, has concealed under an acknowledgment of an outer guidance for conduct an inner willingness on the part of men to assist in the job of drawing specifications for their own action. This willingness is the more clearly revealed by the fact that the appeal to nature has been traditionally made, as Ritchie observes in his *Natural Rights*, by those to whom new occasions have already taught new duties. When humanitarianism awakening through the Renaissance wished to prescribe new limits to old states, the voice of enlightenment, notably in the person of Grotius, spoke compelling intimations to reluctant sovereigns from oracles of nature.

What dictated new duties to old sovereigns

from behind the disguised but stern sanctions of a rising democratic sentiment bespoke more palatable duties to the new claimants of sovereignty, i.e. to the freshly enfranchised citizens. Natural law stood back of natural rights; and natural rights were interests: life, liberty, happiness and, not infrequently (see Locke particularly), property. When the right is used to support rights that are clearly interests, a new interpretation of duty is indicated.

Utilitarianism supplanted the natural rights philosophy as the latter had slowly transformed religious philosophy. The entire process represented a sort of "transvaluation of values." In both the older views, but notably the religious one, the business of life was to do one's duty—duty derived from without and sanctioned by external pressure. With relation to another life duty indeed might lead one to the good; but for this life to do one's duty was the good. It had, nevertheless, been long noted that while duty might be the good, it did not always get one the goods. (When I saw the prosperity of the wicked, ran the old Hebrew psalmist's complaint, then my feet almost slipped.) In the rising modern world of multiplying rights and increasing efficiency the goods were destined to become the thing. "Good" as the common quality of all kinds of goods became naturally the basic ethical concept, and duty but a means to good(s) as the end. God might still be needed as an ultimate buttress for nearer social sanctions; but nothing more was needed to explain the notion and to constitute the fact of duty than a clear understanding and an adequate appropriation of pleasures and pains. Instead of crucifying the flesh, as in the religious view, or suppressing emotion, as in the stoic view, the modern mind not only acknowledges feeling as morally legitimate but constitutes of it the ethical ends to which duty is prudential means. Duty appears in such a milieu as the demand laid upon us to use our intelligence to maximize utilities and to minimize disutilities.

For such a perspective two problems remain: how to explain the esoteric aspect of the experience called duty and how to procure the maximum intelligence for the guidance of conduct. It is admitted that many if not all people have an inner stress and strain in directing and particularly in redirecting conduct. This experience of obligation, the sense of duty, seems in the having to be more than a merely difficult calculus of advantage. Utilitarianism and its contemporary affinities (behaviorism, prag-

matism, Freudianism) admit that it is more but deplore the "more." Such poignant experience as that historically connoted by the term duty, while all too common, is pure inefficiency, indicates lack of personality integration and betokens the hangover of authoritarian institutions, exacting external standards and ugly early experiences. The stern father, the repressive school, inhibitory public opinion—these are the tyrants of whom such a sense of duty is the natural but misbegotten child. "Conscience is the inside of custom," "conscience is the voice of the group sounding in the individual," "duty is social dominance masquerading as individual censor"—these are contemporary sociological explanations of the psychological sense of duty where it is more than a positivistic preoccupation over how to achieve this or that.

But all these, although explaining duty derogatorily, assume that it is a social derivative. The problem then presses as to the fruitful role of the social in the individual. The romantic age is passed when men dreamed of either abolishing institutions or fleeing them: as for flight, there is nowhere to go; as for abolition, the concept "social" is now widely held to be implicated structurally in the very notion of the individual. "When me they fly, I am the wings." Consideration of the concept of duty leads easily to a struggle against every form of authoritarian institution and to an unremitting insistence upon a completion of the democratizing process in family, in school, in church, in state, in industry. Men cannot do their duty until they no longer feel the sense of duty. Thus the dictum of Immanuel Kant that duty is not duty unless done exclusively for its own sake is completely reversed. To be intelligent in the adaptation of means to ends becomes, for such a point of view, the supreme human virtue. The chief thing, moreover, that stands in the way of universal intelligence is the presence of authoritarian institutions transmitting their influence through an educational procedure like themselves. The sense of duty is the last silent witness of a past which the sooner overcome and forgotten, the better.

The use of some such criticism of existing duties in the current Fascist and Communistic protests against bourgeois morality does not mean, however, that in a future made by Communists or Fascists the social determination of the individual would be less than in the past. It appears to mean only that while they remain effective without having the prestige of being

traditional this determination will be more frank, even if also more ruthless. But they clearly strive to become traditional and to substitute inspired education of the young for difficult coercion of the old. Moderates, who struggle against the old order but fear equally the dominance of new class conscious groups, still pin their faith to liberty democratically arrived at and still hope that subversion of authoritative institutions can be made to justify itself by diminishing authoritarianism. For those, descendants for the most part of nineteenth century liberalism, it remains a working faith that men are active by nature; that the common ends of activity are the only moral goals; that the cooperative quest for the most efficient means thereunto is at once the scientific and the ethical process; and that the only generalized duty is the duty to be uniformly intelligent.

T. V. SMITH

See: ETHICS; MORALS; RELIGION; EDUCATION; LAW; CUSTOM; TRADITION; INSTITUTION; SOCIAL PROCESS; AUTHORITY; CONFORMITY; COERCION; SANCTION; CONDUCT; NATURAL LAW; NATURAL RIGHTS; UTILITARIANISM; INDIVIDUALISM; LIBERTY; DEMOCRACY; LIBERALISM; FACISM; COMMUNISM.

Consult: Plato's *Republic*, text and translation by Paul Shorey, Loeb Classical Library, 2 vols. (London 1920); Aristotle's *Nicomachean Ethics*, text and translation by Harris Rockham, Loeb Classical Library (London 1926); Grotius, Hugo, *De jure belli ac pacis* (Paris 1625), tr. by A. C. Campbell (Washington 1901); Hobbes, Thomas, *Leviathan* (ed. by A. R. Waller, Cambridge, Eng. 1904); Locke, John, *Two Treatises on Government* (2nd ed. London 1694); Ritchie, D. G., *Natural Rights* (ed. by J. H. Muirhead, London 1895); Green, T. H., *Lectures on the Principles of Political Obligation* (London 1895); Mill, J. S., *Utilitarianism* (15th ed. London 1907); Dewey, John, and Tufts, J. H., *Ethics* (New York 1908); Jodl, F., *Geschichte der Ethik in der neueren Philosophie*, 2 vols. (Stuttgart 1882-89).

DWIGHT, LOUIS (1793-1854), American penologist and philanthropist. Dwight prepared for the ministry at Yale and the Andover Theological Seminary but was early incapacitated for an active pulpit career because of a hemorrhage of the lungs, which he suffered from inhaling "exhilarating gas" at a chemical lecture. He became an agent for the American Tract Society in 1819 and for the American Education Society in 1823, but persistent ill health finally drove him to undertake a thousand-mile horseback trip through the south Atlantic states in 1824-25, distributing Bibles to prisoners for the American Bible Society. Shocked to the quick by the terrible neglect of

the prisoners and the grave abuses in the institutions, upon his return he founded the Prison Discipline Society of Boston, taking as inspiration the work of John Howard, the English prison reformer. As the guiding spirit of this society for the remainder of his life Dwight was chiefly responsible for the victory in the United States of the Auburn system of congregate work and dormitory cell isolation of prisoners over the Pennsylvania system of isolated cellular confinement at all times. His reports on imprisonment for debt were a leading factor in the abolition of this abuse, and he worked constantly for the segregation of the insane in hospitals rather than in prisons. The best source material on prison conditions in the United States in the second quarter of the nineteenth century is to be found in Dwight's annual *Reports of the Prison Discipline Society* (3 vols., Boston 1855). He also made an important report on the prisons of England and the continent as the result of a trip to Europe in 1846.

HARRY E. BARNES

Consult: Jenks, W., *A Memoir of the Rev. Louis Dwight* (Boston 1855); Lewis, O. F., *The Development of American Prisons and Prison Customs, 1776-1845* (Albany 1922) ch. xxiii.

DYAKONOV, MIKHAIL ALEXANDROVICH (1855-1919), Russian historian. Dyakonov was professor of the history of Russian law at the University of Yuriev and later at the University of St. Petersburg; in 1909 he was elected member of the Russian Academy of Sciences. His works are concerned chiefly with the Moscow period of Russian history. *Vlast moskovskikh gosudarey* (Authority of Moscow kings, St. Petersburg 1889), based mainly on a study of the church literature, covers the history of Russian political ideas to the end of the sixteenth century. *Ocherki obshchestvennago i gosudarstvennago stroya drevney Rusi do kontsa XVII veka* (Essays on the social and political organization of ancient Russia to the end of the seventeenth century; Yuriev 1907, 4th ed. St. Petersburg 1912) is a university text remarkable for its clarity and compactness. *Ocherki iz istorii selskago naseleniya v moskovskom gosudarstve XVI-XVII vekov* (Studies in the history of the rural population of Muscovia in the sixteenth and seventeenth centuries, St. Petersburg 1898), a collection of studies on the several rural classes of Russia, is interesting for its contribution to the origins of serfdom. Upon a careful examination of sources Dyakonov

The cry for cheap money has been raised in many places—by the extreme laborites in Australia as well as by the German Nazis. Such demands can be fought successfully only where rigid banking laws exist. It is perhaps wiser to maintain such guaranties against hasty action of central banking authorities or undue influence by sectional and temporary political pressure.

The time has passed when governmental intervention in economic affairs was considered a crime against immutable economic laws. But it is not so certain that the benefits of intervention, apart from institutional changes, are so great that any society should aspire to experience its maximum development. The automatic wisdom postulated by the liberal economist as resulting from natural equilibrium in a purely competitive world may well be doubted; but the terrible lack

of equilibrium which can result from centralized intervention must not be ignored. Intervention may be wise; but it can be wise only if those who exercise it are full of wisdom. And as this is by no means a certainty, intervention ought not to be made too easy.

MORITZ JULIUS BONN

See: ECONOMICS; PUBLIC WELFARE; ORGANIZATION, ECONOMIC; COMMERCE; MERCANTILISM; LAISSEZ FAIRE; INDUSTRIALISM; IMPERIALISM; NATIONAL ECONOMIC PLANNING; SOCIALIZATION; GOSPLAN; FASCISM; SOCIALISM; AGRICULTURAL POLICY; AGRICULTURE, GOVERNMENT SERVICES FOR; BUSINESS, GOVERNMENT SERVICES FOR; GOVERNMENT REGULATION OF INDUSTRY; GOVERNMENT OWNERSHIP; PRICE REGULATION; PRICE STABILIZATION; CENTRAL BANKING; TAXATION; NATURAL RESOURCES; INTERNATIONAL TRADE; COLONIAL ECONOMIC POLICY; PROTECTION; FREE TRADE; EXPORT DUTIES; VALORIZATION; LABOR LEGISLATION; LABOR, GOVERNMENT SERVICES FOR; FOREIGN POLICY.

ECONOMICS

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ECONOMICS

THE DISCIPLINE OF ECONOMICS. Economics deals with social phenomena centering about the provision for the material needs of the individual and of organized groups. It was once maintained that in order to claim the right to a separate existence an intellectual discipline must have a distinct subject matter and a specific methodology. As tested by this criterion the above definition is highly unsatisfactory: the line of demarcation between the subject matter of economics and that of other social scientific disciplines is very shadowy, and no mention is made of a special methodology. Yet to make this definition more specific would be to enter at once into the realm of controversy, to engage in a battle of words, in which slightly different nuances of definition disguise radical differences in approach and emphasis in the study of the subject. Economics, which has long been and will perhaps ever continue to be the battle ground of rationalizations

for group and class interests, has suffered more than any other discipline from the malaise of polemics about definition and method. Economics was defined as a science of wealth and as a science of welfare; it was spoken of as centering about the business enterprise and as including the entire range of economic behavior; it was declared to be essentially abstract and deductive or essentially empirical and descriptive; it was proclaimed by some as a science and by others as an art. The modern student regards these controversies not as dispassionate attempts to attain by logical means to eternal verities, but as the reflection in one field of changes in *Zeitgeist* and of shifts in the class structure of economic society. He is more frankly concerned with specific problems suggested by the thousand and one maladjustments in the functioning of the economic system; and he endeavors to bring his intelligence to bear upon their solution without concerning himself with the question whether the problems

are purely economic in character or whether the procedure employed is in line with the approved methodology of economics. For his purposes the broad definition of economics given above should be entirely adequate; it indicates that economics is a social scientific discipline and that it is concerned with the relations of man to man arising out of processes directed to the satisfaction of material needs.

The shift of emphasis and succession of points of view may be traced even in the history of the name of the discipline. The term economics is derived from the Greek *oikonomike*, denoting the management of the household (*oikos*), which became in application to the household of a free commonwealth (*polis*) political economy. At the close of the Middle Ages the Greek nomenclature was taken up by French writers. In 1569 Prudent le Choyselet published a *Discours oeconomique*, which dealt primarily with an agronomic question. In the meantime Aristotle's conception of politics had made headway and the term "police" began to be used for the science of government. In 1615 there appeared Montchrétien de Watteville's *Traicté de l'oeconomie politique*, in which he argued that, contrary to the Greek view, "economy" must not be separated from "police" because "the science of wealth acquisition is common to the state as well as to the family." He identified "political economy" with the public housekeeping (*mesnagerie publique*), which included not only government finance but also the *bonne police*, or regulation of agriculture, trade and industry. Montchrétien's example was, however, not at first followed. As late as 1745 Claude Dupin wrote his *Oeconomiques*; in 1750 the *Oeconomische Nachrichten* was started; and the physiocrats were soon called simply *les économistes*. In Italy Genovesi advocated the term civil economics and Ortes national economics; but they met with little success, although in Germany the term *Nationalökonomie* had considerable vogue in the nineteenth century.

In England Petty was the first to speak of "political economies" and of "oeconomicks" in the sense of "political arithmetick." It was not until the next century that police became common. Hutcheson in his *System of Moral Philosophy* (1755) speaks alternately of "oeconomics and politics" and "civil polity"; and Adam Smith devoted his lectures of 1763 to "justice, police, revenue and arms," including under police "cleanliness and security, cheapness and plenty, commerce and manners." Steuart's *Inquiry into*

the Principles of Political Oeconomy (1757), however, popularized the term political oeconomy, so that Adam Smith refers to it alternately "as a branch of the science of a statesman or legislator" and as a discipline dealing with "the nature and causes of the wealth of nations." By the beginning of the next century the new discipline was everywhere called political economy.

During the nineteenth century economics became a self-conscious discipline: much attention was paid to method, to the distinction between economics and related disciplines and to the divisions between various schools of economic thought. In this connection sporadic attempts were made to apply new names: Whately suggested catallactics, or the science of exchanges; Hearn used plutology, or the science of wealth; and Ingram insisted on chrematistics, or the science of money making. These were intended in almost every case not merely to indicate more clearly the content of classical economics but to prevent a complete identification of economic science with this system of economic thought. For this reason such attempts were bound to prove unsuccessful. A more important change came toward the end of the century, when economists became aware of the fact that political economy was too narrow a designation for a discipline which dealt with economic relationships and economic change in society, often without reference to political factors. The new name preferred was economics or social economics, the latter particularly in Germany. The pioneers in this respect were Mayo-Smith (*Statistics and Economics*, 1888), E. B. Andrews (*Institutes of Economics*, 1889), Pantaleoni (*Principii di economia pura*, 1889) and Dietzel (*Theoretische Sozialökonomik*, 1895); but perhaps most credit is due to Marshall, who in 1890 published the first *Principles of Economics*.

One reason for preferring economics to political economy is that the discipline had ceased to be a system of inquiries with a direct bearing on questions of economic policy as it had been in the eighteenth and early in the nineteenth century. After a certain point has been reached, the comprehensiveness of the body of principles and the abstractness of methods employed in establishing them have led to a clear cut separation of theory and practise. In England Senior's *An Outline of Political Economy* (1836) was probably the first to draw attention to the rigidly abstract and hypothetical character of economic theory and to distinguish theoretical economics from the art of economics serving the needs of the

statesman. In Germany such a separation was favored by the fact that the system of economic theory received from England was combined in general texts with a *réchauffé* of old cameralism under the name of applied, or "practical," economics. Later this division into theoretical and applied economics became crystallized into a separation of theory and policy. But even in German speaking countries this division was not universally accepted. In his *Allgemeine Volkswirtschaftslehre* (2 vols., 1900-04), for example, Schmoller included under each topic a historical introduction, a statement of principles and a discussion of policy. The collective *Grundriss der Sozialökonomik*, begun in 1914, breaks entirely with the old divisions. In other countries the distinction between pure and applied economics met with little favor; until the end of the nineteenth century general treatises have well nigh invariably included both fields. Since then, however, it has become common in the United States to divide textbooks into two parts with headings something like "economic principles" and "economic problems," the first including a discussion of value and distribution and the latter being devoted to such topics as money and banking, labor problems, transportation and the like.

The content of what at the present time constitutes economic principles is indicative of the development through which the systematization of economic theory passed in the course of a century. In 1811 D. Boileau (*Introduction to the Study of Political Economy*), basing himself partly on Jakob, divided the subject into the increase, the distribution and the consumption of wealth. In 1821 James Mill, the great systematizer of the classical school, divided theory into parts dealing with the production, the distribution, the interchange and the consumption of wealth. With the substitution of exchange or circulation for interchange this division remained typical for a long time. With the acceptance of the marginal utility approach the topic of value, originally treated under exchange, was given more prominence; the more practical topics originally found under exchange, such as money and credit, transportation and the like, were either constituted into semi-independent disciplines or relegated to a separate part; production was identified with the supply determinant of value and consumption with its demand aspect. As a result theory proper was reduced to a closely integrated analysis of the principles of value and distribution. Where the old fourfold division was kept, another part, the treatment of the economic system as a whole,

was usually added to it; this is concerned primarily with dynamics, or the study of economic cycles.

The differentiation of economics into separate teaching disciplines has been almost inevitable because of the complexity of the subject. Since fiscal problems are so largely distinct from general economic problems, it is only natural that fiscal science, or public finance, should have been erected at an early period into a separate subject. As early as 1729 Dithmar distinguished economics, which deals with the securing of industry, food and wealth, from cameral science, a study of the revenues and expenditures of the prince, and from the science of police concerned with the numbers, morals and prosperity of the people. In the course of time police and cameral science coalesced to form the science of finance, or fiscal science. Later other disciplines acquired separate existence: agricultural economics, business economics, money and banking, international trade, transportation, are all taught separately, have given rise to special research techniques and have developed an extensive literature of their own. Their dependence upon and interrelations with general theory are, however, much closer than in the case of fiscal science.

EDWIN R. A. SELIGMAN

HISTORY OF ECONOMIC THOUGHT. Introduction. The economic thought of early civilizations is reflected principally in the legal codes and in the religious writings. It was not until the beginnings of political and social science among the Greeks that an attempt was made to analyze economic phenomena. But even by the Greeks wealth was treated largely from the moral point of view and economic discussion was subordinated to political considerations. Among the more than one hundred and fifty works on economics which, according to J. Camerarius (*De re rustica*, 1577), were written by the Greeks only a few have survived. Xenophon devoted most of his work on *Oeonomike* to domestic economy. He defined wealth as the surplus of possessions over wants, emphasized the idea of utility, stressed the advantages of division of labor, regarded agriculture as the mother and nurse of all the arts and declared handicrafts objectionable as weakening the body and interfering with the leisure of the citizen. In another work he propounded the maxims of just taxation and discussed the influence of demand and supply, the relation between the quantity and the value of money and the law of diminishing returns. Plato divided

commodities into productive and acquisitive, analyzed the benefits of exchange and pointed out the function of money in uniting incommensurable goods. Even in Aristotle the economic discussion is incidental, yet he is responsible for some of the most fertile ideas of later discussion, such as the distinction between utility and value; the definition of wealth as goods capable of accumulation, possessing utility and limited in quantity; and a clear exposition of the function of money.

In Rome systematic discussion was virtually limited to the treatises on agronomy. Cato, Varro, Columella and Palladius, basing their work on that of Mago the Carthaginian, discoursed on the relative advantages of large and small farms, on the drawbacks of absenteeism and on the economic shortcomings of slavery.

The advent of Christianity with its insistence on individual salvation exerted a potent influence on the current attitude to charity, poor relief, the dignity of labor, the position of women, the treatment of slavery and the limits of private property. But the chief economic discussion of the church fathers, as in Augustine, Tertullian and Jerome, related to the legitimacy of trade and the criticism of the profit motive. With the rise of commerce and industry in the twelfth century it became necessary to deal more fully with business conditions. The theologians, the canonists and the legists became therefore increasingly engaged in discussing the problems of usury, fair price, money and banking, interlocal finance and public credit. Along with this went incidental analyses of the influence of cost of production on value and of demand and supply on price, of the relation of individual to social utility, of the nature of interest and the growing evasions of the usury prohibition, of the attributes of money and the formulation of Gresham's law, of the limitation of credit and of the principles of taxation. But the main emphasis continued to be put on the ethical significance of the economic action of the individual, whether subject or prince.

With the beginning of capitalism in the sixteenth century attention was shifted from the individual to the community and the questions of group welfare were pushed into the foreground. The opening up of the through sea route to the East, the discovery of America, the revolution of prices, the growth of wholesale trade and the infiltration of capital into industry were responsible for the disappearance of feudalism, the passing of the village economy, the decay of the

guilds, the consolidation of peoples and the concept of national wealth. The humanists, the reformers, the radicals and the utopians began to consider existing problems in a new light. Hales, Bodin and Davanzati attacked economic questions in a non-mediaeval way and the bullionists, particularly Malynes and Milles, frankly raised the question of national prosperity.

The concept of national wealth as affected by state control was stressed by the mercantilists. Their leading objectives were an increase of population, the protection of agriculture and industry, the economy of low wages, a favorable balance of trade, the development of a colonial system, the accumulation of capital with a resulting low rate of interest and a reform of the revenue system. In the following century the increasing importance of capital in industry and the growth of the foreign market engendered a closer analysis of national wealth and the formulation of general principles, the philosophical basis of which had already been laid by Pufendorf and further developed by Hutcheson and Christian Wolff. When the next stage of capitalism was reached by the advent of *la grande industrie* in France and the triumph of the domestic system in England, a closer study of capital and its various modes of employment led to the formulation of universal economic laws by the physiocrats and Adam Smith.

From this point on the movement of economic thought is best traced by following the succession of schools. It is not to be inferred that all writers on economics can be easily classified by schools, that the various schools exhibit an equal degree of cohesion or that there has been a clear succession of schools for the discipline as a whole. Nevertheless, an exposition of the theories of the various schools, an account of the leading factors in their development and a statement of their residual contribution to science is the only possible way of presenting the history of a subject in which the interest and *Weltanschauung* of the student count for so much in the final result. The first and probably the only school in the true sense of the term was that of the physiocrats, but it dominated economic thought only for a short period and its influence was almost entirely limited to France. The classical school which followed it has left an impress on the science clearly discernible to this date; it had an enormous vogue in England, on the continent and in the United States, and for nearly a century economics was virtually identical with its doctrines. In influence only the later school of

marginal utility is at all to be compared with it. At the present time marginalism together with its variant known as mathematical economics has probably the largest following among economists. Apart from the two central schools, between which the neoclassical school occupies an intermediate position, there must be mentioned the varieties of dissidence from abstract economic theory. Of these the best known are the historical school, whose influence has been strongest in Germany, and the institutional school, whose following is even at present virtually limited to American economists. Socialist economics represents a reinterpretation of classical doctrines in terms of a social philosophy which emphasizes the historical character and the class structure of the capitalist society. Socio-ethical dissent from the teachings of the "dismal science" paralleled the development of the latter almost from the beginning, but its theory was never elaborated in great detail or well organized about a single unifying principle. Finally, the present day German school of universalist economics, the achievements of which have really been sociological rather than economic in the narrowest sense, embodies dissent from the main classical-marginalist tendency by emphasizing the aspect of the whole, the organic and spiritual rather than the mechanical and materialistic nexus between men in society.

EDWIN R. A. SELIGMAN

The Physiocrats. In the middle of the eighteenth century France was still primarily agricultural. It possessed the largest area of naturally fertile land to be found in western and central Europe and its richest inhabitants were generally those who owned landed estates. The preeminence of agriculture as a form of labor and of wealth was there still taken for granted. If the first scientific doctrine of economics was to be formulated in France, it was natural to base it upon the principle of the primacy of agriculture. Important contributory circumstances were that throughout the first third of the century industry and commerce had remained stationary and that in the same year in which the founder of the school published his first economic work the Seven Years' War broke out, cutting France's foreign trade in half, ruining its merchant marine and compromising its colonial future but leaving its fields and pastures intact.

At this date the example of the other great western power, England, could not appreciably weaken the validity of the French traditional

viewpoint which in the past had been shared by most of the great states: it was easy to regard English agriculture, the most efficient and the most prosperous in Europe, as one of the principal foundations of British prosperity. The tradition of agricultural primacy was even less contestable in application to the English colonies which were growing up in North America. Holland, on the contrary, was declining; its greatness had been founded merely upon the ruin of Antwerp, and the development of its rural economy had simply kept pace with that of its commerce. As for Spain, it could be argued that it lost the rank of a great power because it attempted to develop its marine at the expense of its agriculture.

Quesnay was not unaware that France had become, in his own words, *un pays de fortune*, and the role that money played there could not have escaped his attention. What he and his followers called for was that the better part of this liquid capital should be devoted to agriculture in such a way as to increase its yield, an increase particularly necessary for the relief of the growing fiscal distress; for the notion that the tax on land constituted the least contestable and the surest source of revenue of the royal fisc was also current in France at the time.

On the other hand, the regime of regulation, protection and prohibition in the administration of industry and commerce had steadily lost favor; liberal tendencies, represented notably by d'Argenson and Gournay, had gradually come to the fore. If economic freedom appears in the physiocratic doctrine as a secondary rather than a primary principle, this "preestablished harmony" of the theories with the general tendencies of the period undoubtedly fortified the belief in their validity at the same time that it more or less consciously inspired their formulation. The revival of the spirit of liberty, in this as in other fields, in opposition to the authoritarian traditions of the preceding age was but a manifestation of the critical spirit that had been gathering force since the beginning of the century.

Yet even while it profited by the heritage of critique and analysis bequeathed by the preceding epoch, the physiocratic system represented a return to synthesis and as such was clearly positive and constructive. Montesquieu's *L'esprit des lois* (1748) marked a transition in this respect. The new doctrine was closely related to the great intellectual enterprise of the period, the *Encyclopédie*, and to the work of such men as J. J. Rousseau and Buffon. Similarly, it may be re-

movement is still to be found in the American societies. In 1930 the six American societies had 3500 members, about half of whom were in New York and Brooklyn.

HERBERT W. SCHNEIDER

See: RATIONALISM; SECULARISM; MORALS; ETHICS.

Consult: Adler, Felix, *Creed and Deed* (New York 1877), *The Religion of Duty* (New York 1905), and *An Ethical Philosophy of Life* (New York 1918); *Aspects of Ethical Religion*, ed. by H. J. Bridges (New York 1926); *The Fiftieth Anniversary of the Ethical Movement, 1876-1926* (New York 1926); Neumann, Henry, *Education for Moral Growth* (New York 1923); Salter, W. M., *Ethical Religion* (2nd ed. Boston 1890); Sheldon, W. L., *An Ethical Movement* (New York 1896).

ETHICS. Although morality and ethics are both related to custom, there is a fairly well observed division of significance between them. Conduct social in fact may be described as moral when it is maintained or even observed as a fact. But as conduct rises from fact to ideal it becomes ethical. In a word, ethics is the organization or criticism of conduct in terms of notions like good, right or welfare. The ethical differentia is the construction or reconstruction of conduct in the light of those rational elements which pass for ideals.

Ethics must be distinguished, on the other side, from theology. Once the element of the ideal is invoked, conduct may lose its tang and concreteness by being seen too much under the aspect of eternity. Conduct affiliated too intimately with ideals grows mystical and loses its social significance. That is, conduct may cease to be ethical from overidealization as well as from underidealization. Indeed, ethics may best be distinguished from theology by regarding its commerce with ideals as a piecemeal give and take rather than as initial surrender and subsequent devotion. Ethics is the secular and critical manner of taking account of the rationalizing process in conduct. Its temper is non-mystical, and its orientation is social rather than theological. Not that religious influence has not tried to furnish a theological foundation for ethics or, more frequently still, tried to provide sanctions to budge conduct toward moral perfection. Rather, in spite of efforts and claims, the history of this relation since Socrates has been the story of the gradual moralization not only of religious machinery but of the gods themselves. Ingersoll's waggish remark, "An honest god is the noblest work of man," has now been documented into seriousness.

Throughout western speculation ethics has

bulked large in the philosophical enterprise as a whole. Since Socrates indicated mankind as the proper concern of "lovers of wisdom," speculation as a guide to conduct has been prominent. While Socrates was unproudly aware of the centrality for philosophy of the ethical impulse, the growing prestige of disinterested thought has not infrequently obscured from his successors the role played in their thinking by ethical motives. Important as ethics has been in the systems of most great philosophers, it is fair to say that it is critical retrospect that has usually enlarged the ethical segment of such systems. While Plato consciously took the good as the kingly center of his system of ideas he seems not to have conceived it (although his critics have been continually quick to do so) as a rationalized projection of what he found satisfactory and could recommend in the social life of Athens, when that life was perfected by excellencies borrowed from Sparta. Even the Platonic metaphysic is moral: the idea of the good is the source not only, as the *Republic* has it, of light but of being also. Aristotle thought to reunite the ideal and the real into a functional unity. But since by nature man is a social animal this unification never strays far from moral paths. Since, however, morality as the factually social is blind, ethics is centrally established in the form of the taste of enlightened and cultured persons. The good is the goal, and it is what cultural connoisseurs declare it to be. If in the metaphysical end God gets more detached from the stirring life of men than was Plato's form of the good, God still preoccupies Himself with what from an inside view is ethical: namely, with His own, let it be hoped also man's, good. Indeed, the very metaphysical detachment of God seems to spring from the fact that nothing save His own intellectual activity is worthy of divine preoccupation.

The historical eventuation of classical Greek philosophy into the frankly practical *Weltanschauung* of stoicism and Epicureanism is itself an oblique acknowledgment of the inner dominance of the ethical aspect. As long as the social texture of the Grecian world held together, the principles of conduct were sufficiently habitual to be intellectualized as aesthetic independents without disturbing the moral course of life. When morality is only habit, ethics easily grows aesthetic. But once the stream of conduct itself was disturbed and men were loosed from ancient familial, political and vocational moorings

by the shifting of trade or the movement of armies, the ideal element had to be consciously related again to conduct to prevent such unmoored elements from drifting. Epicureanism and stoicism provided a way of life for those who but for them would have had no cues for conduct other than merely the hated cues of alien constraint.

When this vast unsettlement in the Mediterranean basin reached peoples seasoned by long adversity into chronic habits of unrestrained idealism, Christianity was born. The Christian doctrine differed from Greek philosophy chiefly in its unshakable affirmation that goodness and power are united into one—a beatific unification of which the poor were to be the chief beneficiaries. Such a faith represents the final limit of the idealizing process. It is easy, indeed inevitable, for the human animal to confront the “worse-in-fact” with the “better-in-prospect,” and as long as there is a discernible continuity of means between the two we have normally the ethical field—conduct related to if not determined by ideals. But when the worse becomes the worst and the better the best, when the gap between the ideal and the real yawns into a gulf so impassable that natural means must be supplanted by divine cataclysm, then supernatural religion displaces ethics as a guide to life. But supernatural Christianity may best be conceived as merely the unrestraint of a process which under control we have described as the ethical impulse. What was added to Greek idealism to make Christianity possible was a certain personal warmth and goodness guaranteed rather than ignored by power: the ethical differentia enshrined supernaturally and got at mystically. Christian philosophy has ever sought progressively more rational methods of making available and effective the assertion of such an ethical faith.

Save for idealism, the one system that has proudly carried on the classical tradition, modern philosophy beginning with Descartes has not been paramously ethical. The idealistic tradition has claimed more than its share of great names in modern times—Leibnitz, Kant, Fichte, Hegel, Green, Bosanquet, Bradley, Royce, Croce—and all of them have been ethically-religiously motivated. But the other movement—represented most prominently by English empiricism—arising, with science and traveling with it *pari passu* has concerned itself in the first instance with the problem of knowledge. When John Locke was importuned by

friends to write an ethics that would match the acumen of his famous essay he replied after many sympathetic postponements that as long as the golden rule was available it was not of primary importance to write a speculative treatise upon ethics. This early modern tendency of the empirical philosophy to regard ethics as purely a practical matter and to conceive practice as wholesomely determined by already available principles, largely religious, marked the predilection of most English philosophy until the rise of the utilitarian movement.

Utilitarianism was only speciously an exception to this attitude; for while it was paramously ethical in emphasis it did not seek speculatively to constitute the principles in terms of which the moral life was to be maintained. Rather it took natural goods—utility, pleasure—as being the final goods and concerned itself with the engineering problem of how to distribute them more justly. In this it was but typical of the tendency of the social sciences in imitation of the natural sciences to break away from the earlier ethico-religious outlook. Giving primary attention thus to means rather than to ends utilitarianism condemned ethics to the service of what may well have been not so much critical standards as outmoded values.

The most persistent question to which political philosophy has attempted an answer is that of the basis of authority. The rise of the state through contract or otherwise, the nature and transfer of sovereignty, the boundaries of fruitful control, the spread of political participation—these and other such questions in the history of political theory are but diverse ways of stating the essentially ethical motif that lies at the heart of politics, the problem, as T. H. Green has it, of “the principles of political obligation.” As this ground has, in L. T. Hobhouse’s terms, shifted from “kinship” through external “authority” to the broadened internal base of “citizenship,” the ethical element of politics has evolved from customary morality to a loyalty rationally conceived and freely chosen. The democratic doctrines of government by consent, of freedom of contract and of speech and of a common good that in nature is universal mark the unabashed florescence of ethics in politics.

In no conflict, however bitterly contested, has ethical conviction ever been the monopoly of either side. Indeed, the more severe the conflict of interest, the more desperate the need

the more certain are the issues at stake, whether economic or otherwise, to be conceived as ethical. Since ethics operates with opposed notions of good and bad, right and wrong, it is in the nature of ethical judgments to condemn the antithesis of what they approve. But to condemn does not forthwith abolish: one's enemy remains in spite of disapproval, unless he can be physically killed off; and the forces of opposition to ethical judgments were early discovered to reach further than such summary physical power. Nature herself took sides, and spirits teemed to succor or to subvert. The appeal to magical and then to religious sanctions for moral support was a way of maintaining morale in the absence of physical potency. If the gods—with their postulated reserves of power—stood with one, one's disapprovals would be at the last effectively approved. Historically, however, there has been strategy as well as power in the religious sanctioning of moral ideals. We have seen already how the idealizing process tends to match insuperable difficulties with affirmational excess. The discrepancy between sexual desire and sexual satisfaction, for example, begot in the Middle Ages an ideal of purity that stopped not short of the demand for complete continence. But not only was God's fairest creature everywhere an enemy of this ideal, as the church fathers pathetically acknowledged, but one's worst enemies here are of his own household. Then must the religious sanction for this moral ideal be tempered with mercy. Apply the rigorous ideal to only a few, being merciful when they fall; and grant to the many the rewards of virtue for a life admittedly second best. Religious institutions have not only in this fashion sanctioned moral ideals which otherwise would have been suspended impotently in mid-air but have also mediated with mercy the rigor of ideal demands. God knows man's weakness as well as approves his strength, and the failure of natural virtue will not be allowed to thwart supernatural grace. How far this humane mediation reaches may be seen by contrasting Christian ethics with Kantian ethics. Although Kant built upon Christian presuppositions he sought a "religion within the boundary of pure reason." The morality that emerged from such confinement—obedience to universal law purely for the sake of the law—exacted a perfection that Kant himself admitted could perhaps not be found. It exacted, in short, the impossible with no leniency to render the impossible tolerable. The

casuistry of scholastic ethics, on the other side, only dimly obscured with subtle proliferations such divine mercy as rendered perfectionistic ethics possible by making it tolerable.

The truth, however, that ideals outrun physical facts—outrun them if uncontrolled to such marvelous excess as demands both religious sanctions and the divine softening of them—does not mean that ideals do not rationalize physical forces, i.e. both arise from and justify them. Religion has always taken sides on what it regarded as crucial issues, giving promise, moreover, of substantial succor to those who would stand fast with the angels. Through sufficient disillusion with such promises either in themselves or in the temporal latitude they allow for fulfilment men may, however, come to limit the idealizing process in the name of practicability. With such limitation "utopian" ethics gives way to "scientific" ethics. This shift really became sincere in western culture only with the work of Karl Marx. As Marx saw it, the early democratic ethic was utopian. It did not even systematically renounce divine aid; in more minds than merely Rousseau's and Godwin's it looked forward hazily and happily to an impossible perfectibility of human nature. Besides, the democratic ethic did not clearly discern the natural history of ideals themselves and so did not see that the conflict of moral ideals is, in a world of limited goods and unlimited wants, little but the struggle for concrete advantage deflected to a realm of temporarily postponed response. The positive illusion that arises from this latter impercipientia is clearly manifest in democratic writing—not more in the ad hoc appeal of the American Declaration of Independence than in the economic doctrine of Adam Smith—in the form of the immature conviction that if all men were but equally honest every issue could be harmoniously adjusted. Great credit therefore belongs to Karl Marx not only for seeing but equally for saying what a natural history of ideals implies.

It generally passes for ethical advance to have subordinated the conceptions of right and duty to the notion of good. It is largely taken for a deepening of insight to see further that the idea of good is integrally tied up with the fact of goods. But it is less frequently seen that right and duty imply that goodness is dynamic and that, being so, it stands in need of a creative technology. It was the most noticeable social function of a "duty" ethics whether Christian

or Kantian to facilitate the maintenance of the economic and institutional status quo. It was the most noticeable function of the democratic ethic, emphasizing good as meaning the right to have and to hold goods, to win through revolution, if impossible through discussion, the goods in question for the status quo. But just as early science fitted its new instruments and transforming functions into old and static conceptions of the old world, so the scientific ethic adapted itself to a fixed notion of good. The utilitarian ethic—taken as the most acceptable formulation of the modern democratic movement—saw basically no distinction between natural and moral good; they both alike were pleasure. And since pleasure is afforded man by nature, Bentham, for instance, saw no way to enforce a moral distribution of this natural good—"each one to count for one and no one for more than one"—save an appeal to sanctions that were almost as external in their operation as had been those of authoritarian ethics. And although Mill believed that a difference of quality in pleasure marks the line between natural and moral good, both qualities were, for want of any clear formulation he had of moral methodology, equally given to man. Moreover, the self-conscious scientific ethic of Marx is bellicose in its assumption that moral good is identical with natural good—all the more so because goods from which "good" borrows its meaning are defined by the materialistic interpretation of history. Although value itself not only derives from labor but is created by labor, goodness is pitched up automatically in the evolutionary process, to be distributed violently through revolutionary means rather than by being itself created through cooperative participation of human intelligence.

The basic point in common between authoritarian and democratic ethics is thus the assumption that moral goodness is identical with natural goodness and that natural goodness is limited so that distribution of it can as a matter of fact (as democracy in crucial instances) or as a matter of right (as Marxianism in general and communism in particular) come about only through violence. Now violence is on any showing not easily identified as itself a case of goodness. And so the pass to which contemporary ethics comes is that of seeing morality arise (although it is generally hoped that it will function independently of such genesis) only as a specific by-product of wholesale immorality. Can a classless society—assuming it to be the

desideratum—arise from the dead ashes of one class burned at the stake by another?

But to revert to the initial characterization of ethics as rationalism bent in the direction of conduct, it may be said that the renunciation of the traditional meaning of reasonable, which identified it with precedent, in favor of the democratic meaning, which identified it with the desirable, seems in the analysis thus far to introduce the necessity of seeking the desirable through means themselves more undesirable than custom, convention, institutionalism, could ever be. The crucial problem of contemporary ethics—as communism and capitalism stand facing each other, steadfast each in its own convictions—is whether goodness can be ethically arrived at. In the light of the analogy with economic goods—which have been found to differ from natural goods by the potency of human initiative and ingenuity to make from the one an unlimited quantity of the other—this problem would seem to turn on the question as to whether moral goodness does not differ from natural goodness in the same way, i.e. by the mediation of human ingenuity and initiative. The analogy is strengthened by the modern assimilation of "good" to goods.

The newest contender for ethical honors—pragmatic ethics—seeks systematically to develop this contention. Its critics have sought either to reduce it back to institutional acquiescence or to foist upon its spirit of revolt responsibility for the violence of Fascism and Bolshevism, but John Dewey, its chief expounder, has insisted that it is a *res media* between institutional conservatism and revolutionary radicalism. The point at which it is claimed that the pragmatic emphasis represents an ethical advance is the creative role of intelligence with reference to moral good. To hold that there is a moral good which comes to be only through judgment is negatively to brand as totally inadequate both the traditional duty ethics and the hedonistic doctrine of the good: the former because it provides intelligence from without with standards so superior as to reduce reason to the slavish role of mere acknowledgment and application; the latter because it provides non-reflective elements of natural experience. If the natural good—as identified by mere liking, want, desire and the like—is the only good, then there is no moral good; and ethics is pure rationalization of caprice or power. If, however, there is in addition a moral good, then it must be either derived from the outside

or created through the incidence of intelligence upon the natural good. In the former case duty again functions through nondescript conscience or the command of some superior power operating through sovereignty either human or divine.

If the pragmatist be logically right in holding intelligence as judgment to function only in problematic situations and if a problematic situation be conceived by him as a juncture of conduct in which there are present no goods sufficiently unambiguous to motivate action, then to make up one's mind as to what to do is to instigate action that would not have been but for the thinking. Now if we add that for man, an animal primarily more motor than rational, all values are activities (although for purposes of simplification the emphasis may be put upon feelings that accompany or satisfactions that complete activities), then we arrive through specific and definite thinking at goods that in no sense were prior to, but that literally are created by, intelligence in its normal exercise. If the only values that ethics can discover to man are either the natural, animal kind or the supernatural, religious kind, then must not man remain forever either a gluttonous brute offending the deity that flickers through his aspirations or a fallen angel struggling with his brute nature through the heroic failure of successive renunciations? But if there happens naturally to man as the legacy of fortunate variations in the long struggle for survival a genuine alternative both to groveling and to renunciation, he may, if he can but summon faith in the creative efficacy of his own efforts, persuade others to share or improve his vision of a better way of life than that out of which the vision arises. If this be possible, activities may result more generous than competition or acquisition; and they may be accompanied by feelings more pleasurable for self and less costly in pain for others. Professional ethics feebly exemplified the principle which if put courageously to work might, it is claimed, rehabilitate ethical theory by making it vital in moral practise. Instead of the ethical *laissez faire* of *de gustibus non est disputandum* there is proposed by pragmatic ethics the doctrine that natural goods are but candidates for ethical honors—honors to be awarded only upon critical proof that the natural goods will stand the wear of time through public scrutiny. Only in this way, say the pragmatists, can the social sciences claim the honor that is rightly theirs, the honor of

vitalizing knowledge by practise and of informing practise with insight. This doctrine may be but the latest ethical distress signal—a signal given by morality at the contemporary crossroads—or it may be a genuine creative synthesis of authoritarian and naturalistic traditions in ethics. But at any rate there is a growing fear that, unless some effective synthesis does emerge, the impending conflict between the mutually desperate convictions of bourgeoisie and proletarian moralities may abolish all ethics in a wholesale crucifixion of the human race.

T. V. SMITH

See: MORALS; PHILOSOPHY; THEOLOGY; CONDUCT; DUTY; AUTHORITY; STOICISM; EPICUREANISM; CHRISTIANITY; CONFUCIANISM; RATIONALISM; IDEALISM; UTILITARIANISM; PRAGMATISM.

Consult: FOR HISTORY OF ETHICAL THEORIES: Sidgwick, Henry, *Outlines of the History of Ethics* (5th ed. London 1902); Martineau, James, *Types of Ethical Theory*, 2 vols. (3rd ed. Oxford 1891); Jodl, Friedrich, *Geschichte der Ethik in der neueren Philosophie*, 2 vols. (Stuttgart 1882–89); Westermarck, E. A., *The Origin and Development of the Moral Ideas*, 2 vols. (2nd ed. London 1912–17); Hobhouse, L. T., *Morals in Evolution*, 2 vols. (London 1906); Broad, C. D., *Five Types of Ethical Theory* (New York 1930); Givier, R. C., "Ethics" in *The History and Prospects of the Social Sciences*, ed. by H. E. Barnes (New York 1925) ch. x; McKenzie, John, *Hindu Ethics* (London 1922); Hibino, Yutaka, *Nippon Shindo Ron*; or, *The National Ideals of the Japanese People* (Cambridge, Eng. 1928).

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FANATICISM is the anglicized form of a word which in ancient times was used of priests supposed to be inspired by divinity. This early religious association is still influential in current usage. By the sixteenth century, however, if not long before, the original meaning had expanded to include forms of noisy madness having no religious basis. Shakespeare used the adjective fanatical with reference to fastidiousness in pronunciation. During the sectarian agitations in the seventeenth century immoderate adherents of the sects in England were called fanatics. The term was spoken of as coined for the purpose, and it was thought by at least one writer to have been "well cut out and proportioned to signify what is meant thereby, even the sectaries of our age." Extension of meaning has gone on in this manner until fanaticism has come to denote frenzied partisanship or blind zeal in any cause, whether religious, social or political. A list of examples prepared today would include the conduct of religious leaders like Savonarola and Jonathan Edwards, rulers like Philip II and Cromwell, social reformers of the type of John Brown and Carry Nation, certain practises of ascetics, mystics and dervishes and such emotionally charged outbursts as inquisitions, witchcraft persecutions and lynching bees.

Appearing in various forms fanaticism in its authentic occurrence is the effect of three passion components. The peculiar combination of these distinguishes it from mental and emotional states—enthusiasm, faith, loyalty and the like—of which it is a perversion and from which it differs in psychological structure and social tendency. Of these three components the most obvious is extreme narrowness and rigidity of temper. The fanatic is so excessively convinced of the truth and importance of a certain idea or feeling that every other interest, personal or social, is powerless to modify it. He may be teachable in some matters, but it is impossible for him to learn anything that would dislodge the fixed idea. The end which he selects as supreme, the path he follows to arrive at that end and the quality of the good to be obtained are never open to question. With the declaration "This one thing I do!" on his banner he marches to victory or defeat. Not only does he thus resist all influences to broaden his allegiance, whether they come as inner promptings or demands from without, but he makes a virtue of despising every experience which does not positively further his dominating purpose. If a conflicting fact cannot be ignored, he distorts its significance. Events

impinge in vain upon his adamant conviction. This blind obstinacy suggests monomania. It supports the opinion that fanaticism borders on insanity.

Combined with this intense assurance is an unyielding determination to make the fixed idea triumph over men. The fanatic is not of a meditative temperament. He finds it insufficient to make sure of the deepest truth and to order his life in harmony. He is a man of action, a fiery propagandist, an unrelenting missionary, ready to consume and to be consumed in the cause of spreading his belief. The doctrinal absolutism of Paul, Loyola, Calvin and the rest was no more inordinate than the unrelenting driving power with which each one of them attempted to subjugate the intellect, desires and will of mankind. No organization or endeavor is immune from fanatical exploitation. The history of political revolutions or of such movements as abolition, prohibition, nationalism, imperialism and industrialism proves how real this danger may be. And in whatever field of action or thought the fanatical sentiment arises, its invariable *modus operandi* is to push out and absorb other fields. When its origin has been religious, as in the case of Joan of Arc, the Jesuit order, the abolition or prohibition movements, it has intertwined itself with political parties and social forces and has entangled them in the destiny of a religious struggle. If it has developed in an economic or political situation, as, for example, in connection with communism or Fascism, it has proceeded to take over the function and authority of religious institutions or has aimed to dominate them. Regarded solely as a manifestation of propulsive energy fanaticism is impressive.

A trait no less characteristic is callousness to pain. The true fanatic's nature includes a quality of hardness which renders it uncommonly insensitive to human suffering, often to the point of cruelty. In the most developed types this insensitivity becomes a positive desire to cause suffering. The desire is frequently introverted, in which case it leads to self-inflicted torments; but it is also turned outward, mercilessly inflicting pain on others. In religious fanaticism this is motivated by a decided antipathy to the satisfaction of natural human desire. There is always a protestation of high purpose and a display of logic to give the suffering an appearance of being rational and right; but a more basic explanation is the presence in the fanatic's disposition of a deep strain of misanthropy, a strong despal of human nature. With this malevolent

attribute in mind Isaac Taylor, in a book of considerable psychological insight published a century ago, defined fanaticism as "Enthusiasm inflamed by Hatred."

Such traits operating in conjunction accomplish results, not infrequently vast results. Some of these are doubtless beneficial. In its total effect, however, fanaticism is inimical to individual and general welfare. Its extreme narrowness of aim, inflexibility and brutal disregard of all values that lie outside the scope of a limited goal constitute it a deeply disruptive force in society. The fanatic's morbid absorption impels him to deny ordinary life interests and to place a high estimate on pathological behavior; compare the compassionate theology of the non-fanatical Pelagius with the ascetic doctrine of the fanatical Augustine or the normal outlook on life of the non-fanatical Phineas Quimby with the abnormal outlook of his fanatical pupil, Mary Baker Eddy. The fanatic is, moreover, abnormally self-centered. Judged by surface appearances his tremendous activity may simulate dedication to a cause, but the deeper motive seems always to be an insatiable, if perhaps generally unconscious, desire for self-aggrandizement. Whether the fanaticism arises out of religion, politics or a class struggle, the fanatic regards himself as "chosen" for the role, and the advance of his cause is inevitably bound up with the vindication of his messianic claims. Humility is as foreign to a fanatic as a sense of humor. Equally antisocial is his unbending self-righteousness. Uncompromising foe of compromise, he places himself and his cause beyond the franchise of other minds. His program, as someone has suggested, is driven into the social structure like a wedge. The way to mutual understanding of differences is closed. Human relations are reduced to unconditional surrender or mutual defiance and the struggle for survival.

While fanaticism may appear in an isolated case it is readily spread by contagion. The extravagant ideas and the enormities of feeling and conduct which characterize it can pass from person to person by imitative repetition. In this way many succumb to the malady who would develop no symptoms of it if unexposed to an infecting source. This is evident at a time of war hysteria or during any group delirium. As a mass expression fanaticism assumes an intensified form. Nor is this only because numbers have a cumulative effect. Two other factors enter. By some susceptibility of human nature individual capacity is raised to a higher power when it

becomes a coefficient of group emotion; and when supported by group symbolism an individual readily drops back into ways of feeling and acting more primitive and wild than are otherwise customary with him. Typical mass fanaticism—a Spanish Inquisition, a witchcraft persecution, a raceriote—is socially irresponsible, ruthlessly malevolent and enormously powerful. An individual fanatic even of the pronounced type is relatively insignificant from the social point of view if he is unsupported by mass fanaticism. If he grows to heroic proportions as a social force, it is because he proves able to call forth in numbers of his fellows fanatical psychoses similar to his own and to unite these into something resembling a mass ego with himself as the dominating intellect and will. As this takes place, that is, as normal persons who are not psychologically predisposed to become fanatics are affected, fanaticism enters its mature and threatening phase.

The causes of fanaticism are very imperfectly understood. They are doubtless biosocial in nature. Neurological abnormality is evidently at the bottom of pronounced cases, with unhappy environmental conditions supplying the explosive stimulus. All of these pronounced types indicate the presence of strong ambition, especially a yearning to occupy a position of prominence in the eyes of men, an ambition which is frustrated by personal handicaps, accident or the circumstances of life. Usually some inhibiting fear or deep sense of insecurity is present also. Very often there appear to be sex complications, shown in the value placed on mystical love trances or by a surrender to what in all probability are sadistic impulses. Fanaticism thus grows out of serious maladjustment of some sort. It is uniformly a compensatory activity, representing self-realization through a deflected channel. The noticeable defiance of socially approved values and arrangements may be regarded as a blind gesture of resentment against obstacles which were sufficient to thwart desires so strong that they could not be killed nor permanently suppressed.

This interpretation holds in general for the individuals who make up a mass fanaticism. In those instances where lack of information, credulity and already existing dogmatic beliefs are more or less deliberately made use of to develop a fanatical scheme, as in Bryan's anti-evolution crusade, the underlying maladjustment is less obvious but need be no less real on that account. As a matter of fact normal individ-

uals may find liberation and an enhancement of personal significance in fanatical commitments. In their daily routine these persons carry the weight of what is called civilized life. They are constrained to engage in steady labor, often in spite of strong disinclinations; they must satisfy vigorous natural promptings in socially restricted ways; they are haunted by economic insecurity and are thwarted in the realization of even moderate ambition. In a word, they are held by a system of pressures to a life more or less consciously resented. Submergence in a fanatical experience, whether this is associated with a more permanent program or is merely a temporary orgy, may bring relief. It may enable them to break through a sense of restraint and futility to a sense of liberty, power, accomplishment, dignity. It is of course all too evident that the cause in which they thus invest their energies need have no ameliorating effect on the unfortunate conditions against which they rebel.

In view of the complex nature of fanaticism, no simple remedial measures will accomplish satisfactory results. Intended cure must take cognizance of both psychological and sociological causes. Predisposing psychic causes can be dealt with only by an adequate science of neuropsychiatry. The process of education is implicated. A type of education that encourages credulity and stresses the finality or absoluteness of attitudes and ideals, thus operating to mold an adventure seeking being into a creature of mechanized habit, prepares the way for social maladjustments and irrational commitments. On the other hand, an educational process that positively encourages the experimental spirit in every undertaking and, while placing unique value upon worthy attainment, emphasizes the tentative character of all aims and achievements contributes an important quality to the kind of human living which is unfavorable to the production of fanatics. But an inescapable element of the problem has to do with the reconstruction of social institutions, especially of those harsh economic and social conditions which drive many otherwise normal human beings periodically or permanently into fanatical states and projects.

M. C. OTTO

See: BELIEF; INTOLERANCE; PROSELYTISM; REFORMISM; INTRANSIGENCE; PERSECUTION; AGITATION; MESSIANISM; ASCETICISM; CHAUVINISM; INQUISITION; WITCHCRAFT; LYNCHING.

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FAR EASTERN PROBLEM. The roots of the far eastern problem lie in the last decade of the eighteenth century; before the twentieth century opened it had become a recognized potential cause of war. In 1904 the war came, with Russia and Japan the antagonists and China's Manchurian provinces the stake. The victory of Japan solved but one phase of the problem, which while relatively less important today than twenty years ago remains still one of the chief sources of international friction.

Until late in the eighteenth century European influence in the Far East was slight and insecure. The hold on India exercised through the British East India Company was loose and devoid of organic political or economic connection with the homeland. Spasmodic European efforts to open up relations with China and Japan had met with little success. The Spanish and English had failed entirely. The Portuguese had a trading post at Macao on the south China coast, the Dutch had one in southern Japan, Russia was permitted to send merchants to Peking at regular intervals, the Dutch were established securely in the East Indies and the Spanish in the Philippines. After 1720 foreigners were permitted to conduct a limited trade at Canton with the "co-hongs" (a few Chinese firms specifically authorized by the Chinese government to deal with foreigners), but they could not enter the city, except a small area at stated intervals. Otherwise the Far East was closed to Europe until the end of the eighteenth century, nor was there any great concern in the West that relations with the Far East were not closer. Such trade with the East as existed was in luxury commodities and while it provided profit to a limited number of individuals it had little effect on the economic and social structure of European countries.

With increasing industrialization in Europe the far eastern stake became a vital one. New markets were essential, and in India and China was half the world's population. Later, new

are inapplicable to intensive or complex farming practises. Tenancy has provided useful systems of division of function in the supply of capital, of management and of labor and under some circumstances has led to more effective use of capital and labor than could have been secured under any other system. It does not necessarily lead to economic, political or social instability or to waste of resources in land. The rise of radical or socialist movements for a time caused fears of the association of tenants with proletarian workers in more or less revolutionary movements. Such views were prevalent in France and Italy in the early twentieth century when syndicalist doctrines were gaining a certain foothold among the *métayers*. In contrast the class of small proprietors were assumed to be reliable supporters of the status quo. There is comparatively little in recent or contemporary experience to support these fears or views.

The most intricate of tenancy problems are those connected with the personal or political and religious liberty of tenants and with the development of social organizations and institutions in areas in which tenancy predominates. Where the tenants normally expect to remain as tenants, where they are attached to definite localities and where, as is usual in such circumstances, their interests are fairly protected by law or custom, there develop social institutions of equal efficiency with those established by communities or proprietors. But where, as in more recently developed countries such as the United States or some of the British dominions, the tenant regards his present occupation as a stepping stone to ownership, where he has little attachment to any locality and where, as is often the case, there is comparatively little protection of his interests by clearly recognized custom or by law, a low degree of development of social institutions is a natural corollary. Conflicts in regard to personal or political liberty tend to arise more often where owners and tenants are of different races or religions, but it is also natural that in periods of political stress owners of land should attempt to use their superior economic status to influence the views and activities of their tenants. Again, actual conditions in this sphere depend on general factors in the social environment, on the general political laws of each country and on the provisions for the protection of the tenants by law or custom. Where cash tenancy exists in the United States or in the British dominions little or nothing is heard concerning political or religious op-

pression, and in some parts of the continent of Europe the tenant is as free as the occupying owner.

A. W. ASHBY

UNITED STATES. Farm tenancy refers to the status of the farmer who hires the farm which he operates, giving for the use of the land either a stated fraction of the crops or other products (share tenancy), a fixed money rental (cash tenancy) or sometimes a combination of the two. The share tenant may work under close supervision by the landlord, as is the case with the southern "cropper," although a large percentage of share tenants and most cash tenants receive little or no supervision except in the form of general provisions in the lease contract, such as a clause specifying the crop rotation to be followed. Farmers who own some land which they operate and hire additional land are classified in the United States census as "part owners" rather than as tenants, although they control in the aggregate a considerable fraction (26.7 percent in 1925) of the total acreage of rented farm land.

Farm tenancy differs so widely in its nature and incidence in different parts of the country that it is hardly possible to generalize in very specific terms for the United States as a whole. On the one hand, farm tenancy may be only a form of contract through which labor is kept on the farm to the end of the crop season; on the other hand, it may be a device through which a highly competent farmer with limited capital is enabled to put into operation the most efficient methods of farming. All types of tenancy have some points in common, nevertheless. The tenant must always work without the stimulus of land ownership, and the tenant farm usually suffers to some extent from the lack of an owner's care. Every tenant farmer is likely to feel that he is subject in some measure to the will of the landlord and that the products of his own enterprise accrue in part to the benefit of the landlord. All that is possible here is an examination of the extent to which American farms have been operated by tenants in recent years, with a very general survey of the different types of tenancy.

Farms were first classified by tenure in the Agricultural Census in 1880, when 1,024,601 farms, or 25.6 percent of the whole number, were returned as operated by tenants. There was a certain amount of farm tenancy even in colonial times, particularly in the older settlements,

but so long as free land was easily obtainable by going farther west, first across the Alleghenies, then into the Northwest Territory, then across the Mississippi, men without capital who wanted farm land were likely to seek such free land rather than to rent farms, except as a temporary arrangement.

Considerably more than one half of the tenant farms reported in 1880 were in the southern states, forming 36.2 percent of the whole number of farms in the south. The development of farm tenancy in the cotton states followed the breaking up of the old pre-Civil War plantations. After the emancipation of the slaves some of the plantations were worked by hired labor, but more of them were broken up into small holdings, each leased to a tenant. Many of the tenants who now operate these holdings are of a special type whose status is on the border line between that of a tenant and that of a hired laborer. These men, who are locally known as "croppers," supply little or nothing in the way of farm implements or livestock and work for the most part under close supervision; one might say that they differ from hired farm laborers only in that they receive their wages in the form of a share of the crop rather than in the form of a monthly or weekly wage. Nevertheless, these croppers occupy their farms, averaging about 40 acres, under a rental contract or agreement, and for this reason they are included in the total number of tenants recorded in the farm census. Croppers are of numerical importance only in the southern states, where they formed more than four tenths of all tenant farmers in 1930—about one third of the white tenants and considerably more than one half of the colored tenants.

In general, a larger percentage of the tenants in the south work under the supervision of the landlord or his representative than elsewhere. The tenant farms in the south, even omitting the holdings of the croppers, are smaller and lower in value than the farms operated by owners, whereas in the north and west the average value and average acreage of the tenant farms are considerably in excess of the averages for owner farms.

Even outside the south, farm tenancy had developed to a considerable extent in 1880, as indicated by the census figures. In Illinois 31.4 percent of the farms were operated by tenants; in Missouri 27.3 percent; in New Jersey 24.6 percent; and in Iowa 23.8 percent. The average for all the northern states taken together, how-

ever, was only 19.2 percent and for the western states 14.0 percent.

In 1890 the percentage of farms operated by tenants in the United States as a whole had increased to 28.4 (as compared with 25.6 in 1880) and in 1900, to 35.3. The rapid increase between 1890 and 1900 was partly if not mainly the result of the disappearance of free land; for by 1900 practically all of the desirable farm land available for homesteading had been taken up.

The percentage of tenancy in 1910 was 37.0; in 1920, 38.1; and in 1925, 38.6. These figures would indicate that during the first quarter of the present century tenancy was no longer making rapid growth. As a matter of fact, however, these changes in the percentage of tenancy for the country as a whole were the net result of large increases in certain states, partly offset by decreases in other states. Between 1920 and 1925, for example, the net increase in the number of tenant farms was only about 8000, but this was the resultant of an increase of about 150,000 tenant farms in 23 states, nearly offset by a decline of 142,000 in the number of tenant farms in 25 other states.

Between 1925 and 1930, however, the number of tenant farms increased from 2,462,208 to 2,664,365—an increase of 201,757, or 8.2 percent, while the whole number of farms declined slightly (from 6,371,640 in 1925 to 6,288,648 in 1930). The percentage of tenancy was thereby increased from 38.6 to 42.4. The number of tenant farms increased in 32 states, the total increase in these states amounting to 241,340, from which is to be deducted the decrease in 16 states, amounting to 39,583. In 9 of the 16 states showing a decrease in the number of tenant farms there was a still greater decrease in the total number of farms, so that the percentage of tenancy shows an increase in 41 states in all. The increase in tenancy during the last five-year period is therefore much more general as well as much greater in absolute amount than in the preceding five-year period. Many factors have contributed to this situation; one which has acted quite generally has been the agricultural depression, which has forced many farmers who held their land under mortgage into the tenant class.

There appears to have been throughout the whole period a rather close relation between the agricultural development of the several states and the advent of growth of farm tenancy. In the New England states, for example, farming was old before the supply of free land farther

west even approached exhaustion. As a result of this situation, supplemented by the fact that much of the New England farm land was of poor quality and therefore not very attractive to a tenant, the percentage of tenancy in these states never attained a very high level; and it has been declining since 1900 (except for slight nominal increases in 1930 as compared with 1925). In the middle Atlantic states also the maximum percentage of tenancy was attained in 1900, since which time there has been a continuous and rather rapid decline. In three of the states of the east north central division, Ohio, Indiana and Michigan, the maximum was reached in 1920, with appreciably lower figures in 1925 and 1930; in Illinois, while the 1925 percentage was lower than the 1920, the 1930 figure is slightly higher; and in Wisconsin there has been a continuous increase up to 1930. All of the states of the west north central division except Missouri show a continuous and fairly rapid increase in the percentage of tenancy, North Dakota presenting a rather spectacular increase from 2.1 in 1880 to 35.1 in 1930.

The growth of tenancy in the three southern divisions has been maintained with local irregularities since 1880, all three divisions starting with relatively high percentages (35 or more) in that year and showing in 1930 percentages uniformly higher than any of the northern or western divisions or states. In 1925, to be sure, 8 of the 16 southern states showed a percentage of tenancy lower than in 1920, but in all except Delaware and Maryland this loss was more than

made up by the increase which appeared in 1930.

In the mountain division the percentage of tenancy has increased rapidly from 7.4 in 1880 to 22.2 in 1925 and 24.4 in 1930. In the Pacific division the percentage of farms operated by tenants has fluctuated considerably, being in 1925 slightly less than in 1880 (15.6 as compared with 16.8) but increasing in 1930 to 17.7, or slightly more than the 1880 figure.

The trend of farm tenancy in the several geographic divisions and sections is indicated by the figures in Table I.

In the census reports tenants are classified on the basis of the form in which the rent is paid, the simplest classification showing only share tenants and cash tenants. The most detailed classification is that of the 1920 census, which is summarized in Table II. Croppers and standing renters (tenants paying as rent a stated quantity of product) were tabulated separately only for the south, the relatively small numbers of cases found elsewhere being included respectively with share tenants and cash tenants. Even this classification does not indicate the variety of relationships which may exist between landlord and tenant.

For an appreciable percentage of all American farm tenants tenancy represents a step on what has been termed the agricultural ladder, by which a young man starting as a farm laborer becomes successively a tenant, an owner subject to mortgage and finally an owner free from mortgage debt. The statistical evidence support-

TABLE I
PERCENTAGE OF ALL FARMS IN THE UNITED STATES OPERATED BY TENANTS, 1880 TO 1930

GEOGRAPHIC DIVISION OR SECTION	1930	1925	1920	1910	1900	1890	1880
United States	42.4	38.6	38.1	37.0	35.3	28.4	25.6
New England	6.3	5.6	7.4	8.0	9.4	9.3	8.5
Middle Atlantic	14.7	15.8	20.7	22.3	25.3	22.1	19.2
East north central	27.3	26.0	28.1	27.0	26.3	22.8	20.5
West north central	39.9	37.8	34.2	30.9	29.6	24.0	20.5
South Atlantic	48.1	44.5	46.8	45.9	44.2	38.5	36.1
East south central	55.9	50.3	49.7	50.7	48.1	38.3	36.8
West south central	62.3	59.2	52.9	52.8	49.1	38.6	35.2
Mountain	24.4	22.2	15.4	10.7	12.2	7.1	7.4
Pacific	17.7	15.6	20.1	17.2	19.7	14.7	16.8
North	30.0	28.0	28.2	26.5	26.2	22.1	19.2
South	55.5	51.1	49.6	49.6	47.0	38.5	36.2
West	20.9	18.7	17.7	14.0	16.6	12.1	14.0

Source: For figures from 1880 to 1920, Goldenweiser, E. A., and Truesdell, L. E., *Farm Tenancy in the United States*, p. 23; for 1925, *United States, Census of Agriculture, 1925*, p. 4-5; figures for 1930 compiled from preliminary reports of the *United States, Census of Agriculture, 1930*.

TABLE II
NUMBER OF TENANT FARMS BY TYPE OF TENANT, BY SECTIONS, 1920

TYPE OF TENANCY	UNITED STATES	NORTH	SOUTH	WEST
All tenants	2,454,804	779,218	1,591,121	84,465
Share tenants, including croppers	1,678,812	422,859	1,212,315	43,638
Share tenants proper	1,117,721	—	651,224	—
Croppers *	561,091	—	561,091	—
Share cash tenants	127,822	103,075	22,672	2,075
Cash tenants, including standing renters	585,005	225,463	324,184	35,358
Cash tenants proper	480,009	—	219,188	—
Standing renters *	104,996	—	104,996	—
Unspecified	63,165	27,821	31,950	3,394

* Separately returned in the south only.

Source: Goldenweiser, A. E., and Truesdell, L. E., *Farm Tenancy in the United States*, p. 120-21.

ing the theory of the agricultural ladder is found in the classification of farmers by age and tenure, which is available for four censuses, 1890, 1900, 1910 and 1920. These figures show in general that a large percentage of the farmers under 35 years of age are tenants, while the percentage of tenancy declines rapidly as one goes on to the higher age groups. Specifically, in 1920 in the United States as a whole 75.8 percent of the farmers under 25 years of age and 56.5 percent of those from 25 to 34 were tenants, while only 16.5 percent of those 65 years of age and over were tenants. Another 1920 tabulation shows that of all owner operators of farms in the United States 44.3 percent had operated farms as tenants previous to becoming owners.

Except for those who are definitely looking forward to the ownership of the farms they occupy, the typical American farm tenant does not stay on one farm very long but moves from one to another. Of the whole number of tenants reported in the 1920 census, 43.4 percent had been on the farms where they were enumerated less than 2 years, and 31.2 percent had been there from 2 to 4 years, leaving only 25.4 percent with a record of 5 years or more on the same farm. This practise of staying but a short time on one farm is the result partly of the prevailing type of lease, which usually runs for but one year, partly of the type of men who remain permanently in the status of farm tenant, and partly perhaps of the characteristically American desire for change.

The idea is widely current that farm tenancy is more likely to be found where farm land prices are high than where they are low. To some ex-

tent the statistics support this idea. Both the percentage of tenancy and the price of farm land are very much higher in Iowa than they are, for example, in New Hampshire or Montana. On the other hand, the percentage of tenancy in Alabama or Mississippi is even higher than in Iowa, although prices of farm land in these southern states are relatively very low. Leaving the southern states out of consideration, however, the correlation between land prices and the extent of tenancy in the different parts of the north and west seems to be fairly good. Theoretically the relation is reasonable. The higher priced land is usually more productive, thereby making it possible for a tenant to pay rent out of the returns from its operation; and, on the other hand, the high priced land is more difficult to purchase, thereby compelling would be farmers to rent the land at least for a time for lack of the capital requisite for its purchase.

Furthermore, the amount of rent charged for the better grades of farm land is often relatively low as compared with the current rates of interest on farm loans. A tabulation of the 1920 census returns for cash rent paid, in conjunction with the value of the rented farms, covering more than 30 percent of all the cash tenant farms in the country, showed that the annual rental formed only 3.54 percent of the value of the farms involved. In the state of South Dakota the cash rent represented only 2.52 percent of the value; in Nebraska, 2.59 percent; in Minnesota, 2.86 percent; in Iowa, 2.88 percent; and in Illinois, 2.97 percent.

Until rather recently the price of farm land had been increasing so rapidly and so generally

that such land could be considered a good investment from the point of view of its price increase alone. The purchaser of farm land, in other words, not only had the use of the land, but also received the increase in its value, this latter speculative element amounting in many localities over a period as long as 20 years to an average annual income in excess of the 3.54 percent return referred to above. The tenant of course got nothing but the use of the land in return for his rental payments, while the landlord received the increment in value in addition to the rent.

Under present conditions the future course of farm land prices is very much in doubt. With improved methods of farming and with declining demand for certain products, especially those formerly grown as food for farm work stock, there would seem to be too much farm land already under cultivation. Under such conditions one would hardly look for any very great increase in farm land prices in the immediate future. Whether this disappearance of the speculative advantage of farm ownership will result in extensive further increases in tenancy remains to be seen.

Tenancy has certain general effects on the method of conducting farm operations. In the first place, the farm tenant is not likely to make improvements in the soil or in the farm buildings, since he cannot be sure of continuous use of them. Improved types of farm leases, desirable as they are, would overcome this difficulty only in so far as tenancy became more stabilized and the tenant less inclined to move from farm to farm. In the second place, he is likely to try to get out of the soil as much in the way of salable products each year as he possibly can, since he cannot be certain of another chance next year. On the other hand, the tenant who has carefully considered the relative advantages of buying and hiring a farm and has decided to invest his capital in stock and equipment rather than in land may be better supplied with machinery and livestock than other farmers of equal initial capital who decide to purchase farms. He may even use more up to date methods; and many farm surveys have shown that tenant farmers under these conditions make larger incomes than owner farmers occupying similar farms in the same neighborhood.

Nevertheless, there seems to be current among the rural inhabitants of the United States a strong prejudice in favor of ownership as against tenancy. Ownership does possess certain very

definite advantages, chief of which is perhaps the fact that the owner unless he is too heavily mortgaged has assurance of continuous control of his farm. There are also certain intangible features, certain incentives, which enable—or compel—a man to work more diligently on his own farm than he would ever do on a rented farm.

Farm tenants in general have a decidedly lower social standing than farm owners. This fact is perhaps largely chargeable to the short term contracts under which farm land is usually rented in the United States and to other incidental conditions which might be remedied through improved forms of rental contracts and rental practises. As matters stand, however, the tenant farmer lives in a poorer house; he has no incentive to make improvements in the residence since it is not his; and the landlord likewise has no incentive to make improvements so long as the tenant will worry along with conditions as they are. Tenant farmers take less part in the organized activities of the locality in which they live; they accumulate less adequate household equipment, especially when frequent moves are in prospect; and in general they profit less from those collective activities which distinguish an enterprising community from a backward one. Without doubt the less enterprising men gradually drift into the class of tenants or remain there permanently in place of advancing into ownership, so that the social condition of the tenant group as a whole is to some extent the result of this adverse selection.

An important modifying factor in the farm tenancy situation, especially in the northern and western states, is the fact that a considerable percentage of the tenants are closely related to their landlords, the percentage running as high as 40 in the state of Wisconsin and materially higher in individual counties. This percentage is based on the results of a question carried on the 1925 farm census schedule, which read: "Do you rent this farm from your own or your wife's parent, grandparent, brother, or sister?" For the United States as a whole, excluding the south, close relationship to the landlord was returned in 1925 by 26.6 percent of the cash tenants and 29.1 percent of the other tenants.

This relationship, which is doubtless partly responsible for the low rent paid by many cash tenants, should receive serious consideration in other connections. Many of the undesirable features which are currently charged to farm tenancy must surely be modified in these cases.

The farm rented from the operator's father or father-in-law is likely to come into his possession eventually by inheritance, even though he does not accumulate sufficient capital to purchase it on a strictly business basis. The tenant on a farm of this type is just as likely to be a permanent resident as if he were already the owner, and his place in the social activities of the neighborhood is likely to approximate that of an owner.

LEON E. TRUESDELL

See: LAND TENURE; LANDLORD AND TENANT; LANDED ESTATES; PLANTATION; LATIFUNDIA; COLONATE; SERFDOM; FARM; PEASANTRY; ABSENTEE OWNERSHIP; LAND SPECULATION; MORTGAGE; LAND MORTGAGE CREDIT; LAND SETTLEMENT; SMALL HOLDINGS; LAND REFORM; AGRARIAN SYNDICALISM; AGRARIAN MOVEMENTS.

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FARMER LABOR PARTY, UNITED STATES. See PARTIES, POLITICAL; AGRARIAN MOVEMENTS.

FARMERS' ALLIANCE. The Farmers' Alliance, the second effort in the United States at national organization of farmers for defense and advancement of common interests, had its origin in farmers' clubs, which by the middle of the nineteenth century had been organized in virtually all parts of the country and by 1858 had begun to federate on state lines. In the newer sections of the west and southwest, where law and order were not established, cattle and horse thieves committed constant depredations and settlers were often in danger of losing title to their lands because of litigation instituted by so-called land sharks. The first objective of these clubs was protection against such dangers, but they soon came to serve other functions, such as promoting agricultural education and providing social activities. Some also practised cooperative buying and selling.

During this period western farmers gave financial support to the construction of railroads to transport their products to eastern markets. For many years, however, freight rates were high and railroad regulation became a

The Union contends that agricultural ills can be remedied only through a fundamental change of the economic order. The farmer himself must go into business and retain all profit that now accrues to those who furnish his supplies and market his products. The Union's outstanding activity has therefore been the promotion of cooperative enterprise, including the purchase of essential farm supplies, the sale of farm produce, the conduct of fire, livestock, hail and life insurance companies and of plants for manufacturing farm products for the market (creameries, pickle factories, etc.).

The Farmers' Union Exchange operates in the northwest as a cooperative buying agency and for some years has taken the entire output of the North Dakota state prison industries and half the output of the Michigan state prison industries for distribution directly to the farmers. The Farmers' Union Terminal Association, a grain marketing agency also operating in the northwest, handled 16,000,000 bushels in 1928. The Farmers' Mutual Fire Insurance Company, organized in 1925, had insurance in force in 1930 amounting to \$55,000,000. The Farmers' Union Mutual Life Insurance Company, organized in 1922, had \$12,500,000 of insurance in force in 1930.

It was as the result of a suggestion made in 1915 by the Union's president that the National Board of Farm Organizations, a clearing house for national agricultural problems and a united front lobbying agency of all farm organizations, was created.

EDWARD WIEST

See: AGRARIAN MOVEMENTS, section on UNITED STATES; FARMERS' ORGANIZATIONS; FARMERS' ALLIANCE.

Consult: Barrett, C. S., *The Mission, History, and Times of the Farmers' Union* (Nashville, Tenn. 1909); Fisher, C. B., *The Farmers' Union* (Lexington, Ky. 1920); Wiest, Edward, *Agricultural Organization in the United States* (Lexington, Ky. 1923). See also publications of the Farmers' Union, including proceedings of its national conventions, its manuals and reports.

FARR, WILLIAM (1807-83), English statistician. Farr was born of humble parentage and owed his chance of professional training to a friend. In 1829 he studied medicine under Orfila and Louis and hygiene under Andral in Paris, where he received his first impetus to the study of medical statistics. Upon his return to England he eked out his scanty earnings in medical practise by giving lectures on hygiene

and medical jurisprudence. In 1839 he entered the newly organized national General Register Office, with which he was associated until his retirement in 1879.

Farr is rightly regarded as the founder of the English national system of vital statistics. For over forty years he supervised the actual compilation of English vital statistics, introduced methods of tabulation which have stood the test of time and a classification of causes of death which has been the basis of all subsequent methods. On the basis of national statistics he compiled life tables still used in actuarial calculations and formulated practical lessons as to the causation and prevention of disease which have been a most powerful factor in determining the course of sanitary history and the triumphs of public health. He used most effectively comparisons of general and specific death rates in different parts of the country as pointers toward local reform and stated the laws governing the course of an epidemic disease, thus helping to lay the foundation of epidemiology.

Farr's most important works are in the form of comments and discussions contained in the annual reports of the registrar general of births, deaths and marriages and in the decennial supplements to these reports, for which he was mainly responsible. A large number of his observations are reproduced in a memorial volume issued by the Sanitary Institute of Great Britain, entitled *Vital Statistics* (ed. by N. A. Humphreys, London 1885).

Farr's influence extended to the continent. He took a prominent part in promoting international cooperation in the field of vital statistics, and if the study of this subject owes more to English data and observations thereon than to those of any other country during the nineteenth century, it is due chiefly to the work of William Farr.

ARTHUR NEWSHOLME

Consult: Newsholme, Arthur, "William Farr, the Father of English Vital Statistics" in *De Lamar Lectures, 1925-26* (Baltimore 1927) p. 203-20; Lukas, F. G., "William Farr" in *Statistische Monatsschrift*, vol. ix (1883) 496-500.

FASCISM. It is difficult to isolate by abstract analysis the distinctive feature of Fascism. Viewed either negatively or positively, it has elements in common with other systems of national organization. If defined simply as a negation of liberalism and parliamentarianism it is inadequately differentiated from communism

and other ideologies which manifest an equal antipathy to these older democratic tenets. Its analogy with varied types of administrative organization is strikingly indicated by the application of the very questionable term "international Fascism" to those ephemeral dictatorships which here and there during the aftermath of the World War practically displaced systems of popular representation, as well as by the present day use—especially among communists and social democrats—of the term as a derogatory epithet, a political catchword devoid of scientific precision. If, on the other hand, Fascism be defined positively as the unlimited sovereignty of the state over all phases of national activity it approximates the *nationalisme intégral* of a group as different as the Action Française.

It is only when viewed as a peculiarly Italian phenomenon that the essence of Fascism becomes clearly delineated. In its philosophy, its origins and development, its political structure and cultural aspirations, it is an integral part of the Italian matrix. The ideology of Fascism viewed historico-genetically is a peculiar fusion of syndicalist theory and the doctrines of Italian nationalism. While the former has gradually receded into the background, the latter has supplied the movement with its central intellectual pillar, the idea of the national state. The nation becomes transfigured into a *corpus mysticum*, an unbroken chain of generations, armed with a mission which is realized in the course of the historical process. The duty of the individual is to elevate himself to the heights of the national consciousness and to lose completely his own identity in it. He has individual rights only in so far as they do not conflict with the needs of the sovereign state.

This conception of the Fascist state, which is essentially a vigorous revival of the idea of nationalism as first developed during the French Revolution, is at the same time a repudiation of the political organization of the national state as set up during the century following the revolution. The rejection by the Fascists of Rousseau's dogma of popular sovereignty automatically invalidated the doctrine of natural rights as well as the infallibility of majority rule. "Broken up and dissipated among millions of citizens preoccupied as a general rule with their own private needs, popular sovereignty was distorted and can no longer be considered a practical expression of organic statecraft." The actual administration, in which "the entire life of the nation is concentrated," must be entrusted to a

limited number of persons constituting an organic unity. The action of the "dynamic" state must be, in contrast to that of the parliamentary system, "quick, sure, unanimous, conscious, responsible." Parliamentaryism was felt to be not only unwieldy but also by reason of the absence of a common outlook between modern parties ineffective; it ignored the "social forces" within the nation and had failed to cope adequately with the political and economic crisis in Italy during and after the war. Against the domination of Parliament and the majority principle Fascism advanced, as is indicated in the preceding quotations, the claims of the élite. Unquestionably it is here that the connection—often exaggerated and often groundlessly denied—manifests itself with Georges Sorel's philosophy of history, which sharply emphasizes the significance of the élite as the embodiment of the genius of a people, an institution or a class. Even when Fascism at a later stage of its development attempted to strengthen its position by harnessing the democratic forces of the state, as expressing themselves in the plebiscite, it was still acting consistently with its basic emphasis on the élite.

The idea of the sovereignty of the state is the very kernel of Fascist social and political theory. The contrast with the French Revolution as well as with the pluralistic conception of the state is apparent in the thesis that although the groups—the *attività sociali*, associations intermediate between state and individual—are to be recognized by the state they are to be strictly subordinated to serving the interests of the state. This conception leaves no room for class struggle, even were Fascism less emphatic in its insistence on the solidarity of capital and labor in the production process over and above their antagonism in the division of the social product. If all the vocations of the country were organized into one great syndicate, the postulate of state sovereignty would lead directly to an "identification of the economic system with the state," the peculiarity of which would consist in the fact that it would still be unwilling to renounce the dynamic force of private initiative. The legislation which sprang from these ideas will be considered later.

The historical beginnings of the Fascist movement are comprehensible only in the light of the severe political and economic crisis into which the World War had plunged Italy. Victory brought the realization of her irredentist aims, but in all her nationalist aspirations which

went beyond this she was disappointed. She had emerged from the war without colonies; the Adriatic Sea, *mare nostrum*, was in other hands. Although the Austrian Empire had been shattered, the presence of the Slavic flank on the east constituted a new threat, which with additional consolidation might prove more dangerous than the old.

In addition to the discontent over the peace treaty there arose a great number of economic and financial difficulties. The productive forces of the country were in part destroyed, in part turned as a result of the war into false channels; the balance of trade and the state budget revealed enormous deficits; the debt to the Anglo-Saxon countries mounted still higher in spite of the termination of the war. On the other hand, the assets, so important in normal times, from "invisible" exports—the savings sent back to the mother country by emigrants, the revenue from tourists and commercial shipping—had sunk to almost nothing. Fortunes and income decreased to a great degree.

Impressed by the profound moral depression created throughout Italy by the international and economic situation the socialist parties, whose radical wings had persisted even after the defeat at Caporetto in their antiwar agitation and in the general situation in 1918 had found excellent material for propaganda, decided with encouragement from Moscow that the hour for action had arrived. An unbroken succession of strikes swept over the peninsula. Although concentrated more especially in the industrial and agricultural regions of northern Italy they radiated to the south, as far even as Apulia and Sicily. The political fate of Italy might have been different had there not intervened between the southern latifundia with their thick layer of agrarian proletariat and the northern Italian industrial area a broad intermediate zone inhabited chiefly by small property owners and tenant farmers essentially middle class in their material interests as well as in their intellectual and moral outlook. Socialism was to pay dearly for the advances which it made among these groups in the intensity of the subsequent antisocialist reaction. The valley of the Po was to be commemorated by Mussolini himself as the cradle of the Fascist movement. Even to the present time Fascism has not denied its agrarian origins. One of the most important sections of its legislation, the *Bonifica integrale*, is expressly designed to increase the number of small landholders.

In March, 1919, Benito Mussolini, who had

been one of the first to advocate the entry of Italy into the war on the side of the Entente, organized his *fasci di combattimento* as bearers of a Napoleonic will to power dedicated to a nationalistic syndicalist program, which contained in addition other heterogeneous elements. The social composition of these groups revealed from the beginning a significant peculiarity of the movement. It cut, as it were, vertically through Italian society and from all strata recruited its followers, who ranged from former service men to syndicalist agitators and workers, to students, to followers of d'Annunzio. The embryonic movement acquired a broader significance when in the course of time Mussolini dropped the trimmings of syndicalism and carried his agitation successfully to the urban and rural middle classes, who gradually attached themselves to the original inner nucleus of shock troops. Finally, with the adherence of members from the upper classes of society, such as the large landowners of the south and the industrial bourgeoisie of Lombardy, the problem of financial support for the party program became less acute. Thus the movement, which at first made no pretenses to formal party organization, consisted merely of the dynamic military minority and the larger group of loosely knit followers.

Mussolini's political tactics during the two years preceding his march to Rome on October 28, 1922, contributed in two significant respects to the later success of Fascism. First of all he carefully avoided saddling the movement in its infancy with a formal program. He consistently made it clear to the people that he relied not upon laboriously prepared and meticulously contrived programs, with which Italy in its political life was surfeited, but on an intuitive comprehension of the situation at hand and a rough and ready solution of it in the interests of the nation. This substitution of charismatic arbitrary leadership in place of a rigid program, which is in full accord with Italian political tradition, made it possible during the early struggles to enlist as active followers or at least as sympathetic observers recruits from all sections, although their only common meeting ground might be an enthusiasm for the national idea, combined with an antipathy to parliamentarianism and international socialism.

A second and more important feature of Mussolini's tactics during this preparatory period was the gradual penetration of Italian administrative and political machinery with his followers and the institution on a broad scale of

volunteer emergency groups which were set up in time of strike—most successfully, in the attempted general strike in the beginning of August, 1922—to keep the essential industries running. Where the state and especially the local representatives adopted a hostile attitude toward the new movement, the party proceeded to supersede them with its own organs—and thus to organize the “state within the state,” the *état postiche* of the French Revolution.

Italy had capitulated even before the Fascist march on Rome. This gradual “methodical” conquest of the state was a part of Mussolini’s revolutionary tactics and at the same time an indication of the empirical nature of Fascist development, which had characterized the entire movement up to that point. The interesting fact should be remembered that many of the most important Fascist institutions—the constitutional position of Mussolini, the Great Fascist Council, Balilla and Avanguardia as organizations for the education of youth—were set up first under the pressure of some immediate situation and only later given constitutional sanction.

The contention that Fascism constitutes a coup d’état rather than a revolution depends upon the definition that is given to these two terms. If Marx’ narrow definition be accepted and the term revolution be applied only to an overthrow of the ruling class by the ruled and to the establishment of a communistic society, then it is immediately clear that Fascism can raise no such claim. A more realistic definition of revolution, however, would include all those situations in which the tension within a state has reached a point where it is no longer possible to maintain a balance through normal means—the broader significance of the revolution depending, of course, on how fundamental are its effects.

It is impossible to understand the transformation of the Italian state resulting from the Fascist revolution except by an analysis of the party organization with its concentration of authority and its hierarchic membership. The Fascist party cuts through the horizontal layers of society, which with the aid of the arbitrary state government hold it together like a clamp. Just as in Soviet Russia, the party seeks through a host of auxiliary groups—associations of teachers, students, railroad men and the like—to extend to all spheres of modern life. Concentration of authority and hierarchy of membership imply that all the reins of party activity come together eventually in the hands of Mus-

solini. All nominations are traceable directly or indirectly to him, and throughout the varied ramifications of the party machine the will of the leaders as a general rule prevails over the component organs. Mussolini controls the decisions in the Great Fascist Council; the secretaries of the provincial and local associations control the activities as well as the membership of the governing bodies. It is a consequence of the aristocratic concept of the élite—as well as an expression of the contempt for the democratic principle of election—that the selection of leaders all along the line takes place through nomination from above. The party hierarchy does not proceed upward from the will of individual voters—not even theoretically, as is the case in Russia—but has its origin among the leaders, whence it permeates downward. An inevitable corollary of this authoritarian hierarchic structure is the unqualified duty of obedience incumbent upon all members. Every individual who wishes to enter the ranks of the Fascists must take an oath which binds him “to obey without question the commands of the Duce . . . and when necessary to shed his blood for the Fascist revolution.” Thus the political structure of the party must be visualized in order to understand the transformation of the Italian state as a result of the Italian revolution.

After the march to Rome and especially after the incisive legislation accompanying the establishment of the “intensified” dictatorship of 1925, Italy must be regarded as a one-party state just as Soviet Russia is a one-party state. The process of fusion of party and state was accomplished in various ways. On the one side the state itself was well adapted to the structure of a hierarchic authoritarian party. The executive power of the state became so strong both in content and in structure that it completely overshadowed the legislative and passed over into the newly created *capo del governo*, Mussolini. The complement of this process was the centralization of the entire administration, which although not carried out at one stroke ultimately eliminated local autonomy in province and community. A second means of fusion was through the constitutional overlapping of party and state. The beginning of this evolution was made when Mussolini proclaimed himself head of the party and at the same time president of the ministry. Further important steps in this direction were the amalgamation of the party militia into the state guard, court recognition of Fascist unions and administration by government appointees of

the youth organizations founded by Fascism. The conclusion of the development was reached in the constitutional erection of the Great Fascist Council, a body which first assembled for the solution of actual questions on the eve of the march to Rome and which was afterward perpetuated as the highest corporate organ of the party. Its manifold competences—such as its noteworthy collaboration in the founding of the second chamber, its expressions of opinion regarding such constitutional questions as the succession to the throne—are overshadowed from a political point of view by that particular one according to which in case of the death of Mussolini it is to submit to the monarch the nomination of his successor. Since the nominee will become equally *capo di stato e duce del fascismo*, the central function of the council may be defined as the perpetuation of the party-state regime beyond the lifetime of Mussolini.

According to Fascist theory the corporative, or guild, state is the visible expression of the supremacy of the state over the economic and social groups within the nation. The nature of this complex structure does not lend itself to brief analysis. The problem is made even more difficult by the fact that the corporative state is still in process of gradual transformation as well as by the impossibility of forming as yet an exact opinion as to how far the legal machinery set up for its realization has altered the actual features of the Italian economic system.

It is significant for an understanding of the corporative state that through it the state administration allies itself with private enterprise and the preservation of the capitalistic order. The former is declared to be the "most practicable and feasible means for serving national interests"; the latter, the best adapted "method of production." In striking contrast to the *laissez faire* doctrines of economic liberalism, Fascism sets forth—most explicitly in article IX of the *Carta del lavoro*, the basic labor constitution of the movement—the right of the state to intervene in the process of production whenever private initiative is unequal to the task at hand or when political interests are at stake. Although of course an emergency administration of inadequately cultivated landed property has hitherto taken place only seldom, an interventionist policy has manifested itself in the limitations on free choice of domicile with a view to restricting the supply of industrial labor, in the discouragement of new factories in large cities and in the decisive state regulation of small merchants.

The most thoroughgoing interventionism of the corporative state is in regard to the freedom of labor. A syndicalist structure incorporating the various vocations of the nation is designed to regulate all relationships involving labor. Although this is accompanied by a campaign of moral and national education among the members the regulations are rigidly binding upon all. Consistent with the emphasis on the supremacy of the state is the effort to transcend the disastrous economic and political effects of class conflict by emphasizing the solidarity of capital and labor in the production process. Actually of course there is still a sharp division between labor associations and employers' associations, leaving the way open to a clash of interests. But since all strikes and lockouts are outlawed, such disputes are to be settled only by arbitration groups or in the last resort by the state *magistrature del lavoro*. According to the labor constitution wages should be determined by three considerations—not always easy to establish—the necessities of life, the potentiality of production and the profits of labor. The critical point in the development of the corporative state is whether the joint associations composed of both capitalists and workers—the corporations, described in article VI of the *Carta del lavoro* as "unified organizations of all productive forces"—can actually exert a wide influence in regulating the individual production processes. If this aim is accomplished, the resulting economic system would constitute an economic autonomy under state leadership, a type of plan-capitalism, with flexible state intervention always in the background—a system which is far different from the unwieldy state socialism on the German pattern.

A further analysis of the political features of the corporative state reveals that in the composition of its membership it is hierarchic, just as the party and the state are, and that in the last analysis its activities are equally inspired and directed by Mussolini. The higher associations, the confederations and federations, control and direct the lower. At the pinnacle of this broad framework are the ministry of corporations and the national council of corporations, which at the time of its inauguration was designated by Mussolini as the economic general staff of Italy.

But the corporative state does more than round out the supremacy of Fascist authoritarianism. The confederations are entrusted with the important function of drawing up a list of candidates for the second chamber, which ulti-

mately, after amendments by the Great Fascist Council, is submitted to a vote of the people. Under the institution of a "sovereign dictatorship" which controls all expressions of public opinion, the chief function of the Chamber of Deputies is to keep alive the contact between the public and the administration and in the process to disseminate and interpret for the benefit of the people the essentials of Fascist policy. And since the majority of deputies emanate from the state recognized vocational associations, the body of popular representatives is capable of providing expert support to the work of economic legislation.

In the supervision of the cultural as well as of the economic life of the state Fascism has manifested its characteristic tendency to put into circulation again currencies which since the French Revolution had been withdrawn. A typical illustration of this conservatism is the educational reform of Giovanni Gentile. His philosophy of "actualism," which has permeated Fascist political and social theory, repudiates the abstract and rational approach of Rousseau as destructive of the personality of the pupil formed by family and religious training. The development of this personality according to Socratic precept is accepted as the true goal of Fascist education, which at the same time consistently emphasizes tradition as one of the great cultural forces. "Popular tradition, so long as it remains a living force among a people which cherishes the words of its ancestors, and the great national literature, which at all times has brought forth masterpieces of poetry, and faith, and knowledge: these, for all their greatness, are accessible even to the poorest."

Fascist school legislation has made religious education obligatory in state schools. Although the relationship of Fascism to the Catholic church is in many respects extremely complicated, it is unquestionably true that the two movements share in common, to a greater degree than at any time since the Risorgimento, many features—as, for example, an antipathy to liberalism and a close contact with the middle classes, especially the agrarian. It would be a mistake, of course, to ignore the political motives which operated on both sides in the rapprochement between the Curia and the king. But it would be equally unrealistic, in considering the monopolization by the Fascists of the social life of Italy—especially of the education of the young—and the irremediable resentment of the Curia, to forget that both groups deem it from time

to time expedient to pose in the eyes of the world as bitter adversaries.

Between the foreign policy of the Fascists and that of their predecessors there is no clear cut distinction. The international relations of a state are predetermined by its geographical location, the vitality and martial virtues of its population and to a less degree by its historical traditions. A very decisive transformation in the inner structure of a country may not find its counterpart in the diplomatic sphere.

Even the methods of Fascist diplomacy reveal little change. Italian politics has hitherto been empirical and realistic and therefore unusually elastic. If at the present time it creates in foreign countries the impression of rigidity it is because in Italy there is no public opinion apart from that controlled by the dictatorship.

What has changed is the vigor with which Fascist Italy makes her diplomatic claims effective. It should not be forgotten that one reason for the rapid expansion of the Fascist movement was the feebleness of Italian foreign policy directly after the war, and in addition that every government which emphasizes so strongly the idea of nationalism and of national mission is invariably committed to a vigorous foreign policy.

Although hemmed in between the French and English holdings in the Mediterranean, Fascist Italy has succeeded by the penetration of Albania and the definitive conquest of Dodecanese in preserving and strengthening its political position in the Adriatic and the Aegean. While the attempt has been made to continue and deepen the traditional friendship with England, the relations with France have occasionally come sharply to a head. The attempted denationalization of numerous Italian settlers in Tunis, the political and economic influence of both powers in southeastern Europe, the difficult problem of naval armaments, have proved the most dangerous points in which the Franco-Italian rivalry has kindled during the last few years. Undoubtedly the position of Italy as a great power and its diplomatic self-dependence have been strengthened under the Fascist government. For the fate of Europe the most critical consideration is whether the Fascist regime in the pursuit of its national aspirations will be successful in reconciling the internal strain caused by its political and national ideology with a peaceful foreign policy.

ERWIN VON BECKERATH

See: GOVERNMENT, section on ITALY; NATIONALISM; SOVEREIGNTY; STATE; REVOLUTION; FORCE, POLITICAL;

ually striving to maintain the reality of the fast, which the appetites are striving to circumvent; this results in casuistry and a host of minute regulations, such as those stating that a drink of water does not break the fast and that wine does if taken for pleasure but not if taken to quench thirst. The hour at which food can be taken has gradually been placed earlier in the day; small collations have been allowed not to count. The present practise of the Roman Catholic church is defined: "The ecclesiastical fast consists in the abstention from food and certain kinds of food, which is observed in the manner prescribed by the Church. . . . The ecclesiastical fast consists, as it were, of three parts, to wit, 1) a single meal in twenty-four hours with the addition of a small evening collation; 2) abstention from flesh and milky foods; 3) limiting the time for taking food" (Gury, J. P., *Compendium theologiae moralis*, 2 vols., Rome 1880; vol. i, pt. ii, *praeceptus ecclesiae* 6). Under the heading of flesh come all animals "living and breathing on earth"; therefore such animals as fish, frogs, snails and turtles are not forbidden. These principles are interpreted with wide latitude. "The Church has only one aim in the discipline of fasting, that of helping us the better to practice the law of God and to progress in a Christian life. If it happens by accident that the observance of fasting, far from serving that end, impedes it . . . it ceases to be binding" (Thouvenin, A., "Jeûne" in *Dictionnaire de théologie catholique*, vol. viii, 1924, cols. 1411-17). Thus if fasting prevents a person from carrying out his work efficiently it must be dispensed with and none but the leisured are bound to fast. The Buddhist church has experienced the same conflict but has decreased the daily afternoon fast of the priests only to the extent of not counting condiments as food.

The decay of fasting corresponds with the loss of its usefulness. It has undoubtedly played a useful part in building up self-control. To realize this one must consider that the children of many less civilized races are subject to little discipline and are much indulged. The fast imposed by the ritual demands a degree of self-control to which they are little accustomed and which proves its value in war and on similar occasions. It may produce a self-satisfaction through the self-control derived from it which may become a motive for fasting and which has become associated with the name of Pharisee (*Luke XVIII: 10-12; Isaiah LVIII*).

As societies advance the tendency is toward

excessive regulation of life so that any superfluous exercises in self-control add to the burden of repression and are discarded. At the same time certain psychological types tend to exaggerate practises of self-repression. The phenomenon called by Freudians "transference from below upwards" doubtless plays a part in fasting, as sex and eating are connected psychologically. The proximity of the stomach to the anus induces a feeling of disgust in introspective minds. Tertullian for example described man as "stuffed with meats . . . fermenting for the purpose of excremental secretion" (*De jejuniis*, ch. vi). Similar views are expressed in Buddhist writings.

Unpleasant as fasting may be when first practised, carried beyond a certain point it produces pleasant sensations of mental activity, lightness and supersensuality, for the sake of which it may be cultivated. Mysticism interprets this as a liberation from the flesh and drawing near to God. Comparable to this is the practise of fasting for the purpose of inducing visions during the quest for guardian spirits by North American Indians.

A. M. HOCART

See: ASCETICISM; HOLIDAYS; INITIATION; SACRAMENT; SACRIFICE; DEATH CUSTOMS; FERTILITY RITES; HUNGER STRIKE.

Consult: Thurnwald, Richard, "Fasten" in *Reallexikon der Vorgeschichte*, vol. iii (Berlin 1925) 191-92; Sumner, W. G., and Keller, A. G., *The Science of Society*, 4 vols. (New Haven 1927-28) vol. ii, p. 642-43, 1180-82; Westermarck, Edward, "Principles of Fasting" in *Folk-lore*, vol. xviii (1907) 391-422; Arbesmann, P. R., *Das Fasten bei den Griechen und Römern*, Religionsgeschichtliche Versuche und Vorarbeiten, vol. xxi, pt. i; Freiburger, Miroslav, *Das Fasten im alten Israel* (Zagreb 1927); *The Ordinances of Manu*, tr. from the Sanskrit by A. C. Burnell (London 1884); Tertullianus, Q. S. F., "De jejuniis" in Migne, J. P., *Patrologia latina*, vol. ii (Paris 1844) cols. 953-78, tr. by S. Thelwall as "On Fasting" in *The Ante-Nicene Fathers*, ed. by Alexander Roberts and James Donaldson, vol. iv (New York 1899) p. 102-15; Duschene, L., *Les origines du culte chrétien* (2nd ed. Paris 1898); Gury, J. P., *Compendium theologiae moralis*, ed. by Antonio Ballerini, Aloysius Sabetti, and T. B. Barrett (33rd ed. New York 1931) ch. vii; Kelly, J. P., *The Jurisdiction of the Simple Confessor*, Catholic University of America, Canon Law Studies, no. xliii (Washington 1927) p. 170-72, 198-202; Clift, J., "Fasting" in *British Archaeological Association, Journal*, n.s., vol. xv (1909) 157-70.

FATALISM is the belief that underlying the events of nature and human life there is an inscrutable and relentless necessity. It is found in early cultures as an unsophisticated acknowl-

edgment, emotionally grounded, that man's desires are involved in a universe which outruns his powers to understand or to control. In this conception the working of fate was not that of an all inclusive mechanism. It was rather the somber, dreadful phase of chance corresponding to the favorable phase of luck or fortune. When in later cultures an ultimate, all ruling fate was enthroned the somber quality remained: fate was ruthless and from man's point of view irrational. In doctrines of predestination theistic religions softened the ruthless quality by subsuming the fact of inevitable necessity under the will of God, whose plan also included the fulfilment of the highest hopes of man. Necessity thus remained, but in a form emotionally acceptable. Scientific philosophies of determinism removed the irrational aspect of fate by interpreting necessity in terms of ordered sequences of cause and effect which included in the causal chain the desires and decisions of men. Within all these systems, however, as in all absolutisms, theistic or impersonal, there is the essential quality of fatalism rationalized and refined.

The idea of fate is probably rooted psychologically in the fact of evil and the inevitability of death. Fate loomed in early mythologies as a dark presence beside or behind the gods who were man's kindly helpers. It is not without significance that the words for fate in early cultures are so intimately connected with experiences of disaster and death. All the Indo-European peoples had the idea of a power or powers which at birth fixed the "share" of the individual in life and determined his destiny (Moirai, Parcae, Norns, etc.). The Slavs and Celts retained the idea of fate in its simplest form. The Greeks, especially the tragic poets, developed it into an inexorable power above the gods; Plato thought of it as a predetermined order and the stoics defined it as a deterministic rational system of the universe. Oracles, divination and astrology were at once practical expressions of the belief and a means of fostering it. In India the earlier ideas of fate (*kala*, *deva*) yielded to the cosmic causal law of karma which holds sway over gods and men. All forms of Hinduism—Sankhya, Vedantism, Buddhism, Jainism and the popular religions (Vaishnavism, Shaivism)—assume this determinant of destiny and build their programs of salvation on a method of breaking the causal chain which everlastingly revolves the wheel of rebirth. Through all the culture history of China also runs the idea of fate or destiny. As early

as the fifth century B.C. the philosopher Micius complains that all the "moderns" are fatalists. Chinese fatalism is grounded in the ultimate cosmic order, the *tao*, which finds practical expression in *ming* as the decree of heaven. Fate feeds on tragedy and the futility of human effort; and the age of the philosophic development of the doctrine of the *tao* was a troubled period in the history of China. Taoism does not demand a practical fatalism but it was so used by Chinese sages ancient and modern. Chucius (1130–1200), whose influence still lives in China and Japan, was frankly fatalistic. The stress placed on fatalism in orthodox Islam is unusual for a theistic religion. Usually religions which develop the idea of an absolute personal God lose the concept of fate in His all controlling will. Resignation to the will of God is substituted for acceptance of fate and functions in exactly the same way. But in most cases the logic of theism which would develop the implications of the absolute divine will is obscured by the social necessity of insistence upon responsibility and freedom. In the case of Islam, however, God's absolute will is stressed and the practical attitude finds expression in the fatalistic conception of kismet.

In strict logic the tendency of absolutes, whether in philosophy or religion, is to yield a cosy quietism in times of social stress and security in individual difficulties. This is especially true of the belief in fate, which in practise serves chiefly as a means of adjustment to irremediable conditions. Moral failure loses its power to crush, material loss becomes tolerable, if both can be attributed to a force beyond human control. In the midst of evils from which there is no escape the doctrine of karma or kismet may serve as an opiate. When danger is extreme or death imminent fatalism conveys security and consolation. For soldiers in battle fatalism yields not only splendid courage but poise and peace. This was the service of Zen Buddhism to the samurai of old Japan and of Moslem fatalism to the soldiers of Allah. For the social process the importance of fatalism lies in the ease with which it may serve as a way of escape from responsibility for social maladjustments. Conditions of unresolved wretchedness are fertile soil for the fatalistic attitude. In many cases the anaesthesia of fatalism combines with the rigidity of long established patterns of social behavior and the interests of privileged classes to produce the quietistic resignation which results in toleration of social wrongs and incapacity for experimental change.

But the approval and resignation with which an attitude of fatalism may regard social stagnation may also be transferred to social change. Fate is blind; it gives solace, not guidance. The same fatalism that may serve to entrench autocracy or the privileged position of a caste will justify successful revolution. Heaven's decree (*ming*) was the best and sufficient authority for many changes of dynasty in ancient China. Fatalism therefore does not necessarily act as a barrier to progress. Human desires drive to their goal with little regard for fatalistic theory when the doors of opportunity are opened. So long as tools and technique for the mastery of nature are lacking, so long as there is no effective solution for the social problems of poverty, sex injustice, insanity, crime and war, the attitude of resignation—be it to fate or the will of God—is the shortest way to peace of mind. The swiftly changing Orient, however, offers convincing evidence that fatalistic ideas are not insurmountable barriers to progress when practical techniques are attained. That fatalism functioned as a method of acceptance of the *fait accompli* without prejudicing future action is further evidenced by the fact that the social group, even when the most deterministic philosophic principles were assumed, never released the individual from responsibility for moral conduct in terms of the approved code. Hinduism, stoicism, Christianity and Islam each in its own way adjusted the inescapable determinism to the demands of social morality. Even when fate was taken logically, as by the Ajivikas in India, Yang Chu in China of the fifth century B.C. and the Sufis in Islam, it was in the interest of action and courageous joy in living.

Faith in a blind and irrational fate tended to disappear in high cultures of long historic duration. The idea was usually replaced by doctrines of determinism with an absolute God or a philosophic ultimate as dictator of human destiny. In either of these traditional forms the fatalistic attitude is difficult to maintain in the modern world. The source of its vitality in the past was human helplessness in the midst of inscrutable and inescapable evils. Under the double attack of scientific knowledge and man's increasing mastery of his environment the foundations of fatalism were shaken. Science has made man at home in the universe, pointed the way to the sources and nature of social disorganization, clarified the mechanism of maladjustments and put into man's hands the instruments of control. With power to change the face of the world and

to escape the fears which troubled the prescientific centuries, man has gained confidence in his ability through intelligence to shape his own destiny. The blind faith in science and the machine which has dominated the last quarter century is an exact antithesis to the quietism of fatalism. The supernatural and mysterious elements underlying fate have vanished. Man sees himself as a changing purposive organization of desires integral with an endlessly complex flowing stream of events. Order in nature, the continuity of heredity, social controls in custom and institution, and learned patterns of response weave themselves together into a new conception of life in society. Fatalism in the old sense has small place in this scheme. The new determinisms—and they are many—are naturalistic and include man's purposive intelligence as an essential and effective element of the complex.

A. EUSTACE HAYDON

See: DETERMINISM; RELIGION; ETHICS; SCIENCE; DIVINATION; STOICISM; BRAHMANISM AND HINDUISM; BUDDHISM; TAOISM; CONFUCIANISM; ISLAM.

Consult: Cicero, "De fato" in *Scripta quae manserunt omnia*, ed. by C. F. W. Mueller, 10 vols. (Leipzig 1878-97) pt. iv, vol. ii, p. 251-69; Nilsson, Martin P., *Den grekiska religionens historia* (Stockholm 1921), tr. by F. J. Fielden (Oxford 1925) p. 167-72; Thomson, J. A. K., *Irony* (London 1926); Cumont, Franz, *Les religions orientales dans le paganisme romain* (Paris 1906), English translation (Chicago 1911) p. 179-82; Engel, Wilhelm, *Die Schicksalsidee im Altertum* (Erlangen 1926); Stevenson, Mrs. Sinclair, *The Rites of the Twice Born* (London 1920) p. 195-97, 436-46; Warren, H. C., *Buddhism in Translations* (Cambridge, Mass. 1896); Schrameier, W. L., *Über den Fatalismus der vorislamischen Araber* (Bonn 1881); Macdonald, D. B., *Development of Muslim Theology* (New York 1903); Wieger, L., *Histoire des croyances religieuses et des opinions philosophiques en Chine* (2nd ed. Hien-Hsien 1922), tr. by E. C. Werner (Hien-Hsien 1927); Jackson, A. V. Williams, *Zoroastrian Studies* (New York 1928) p. 219-44; Luzzatti, Luigi, *Dio nella libertà* (Bologna 1926), tr. by A. Arbib-Costa (New York 1930) p. 211-27; Russell, H. N., *Fate and Freedom* (New Haven 1927) p. 3-57; Herrick, C. J., *Fatalism or Freedom* (New York 1926); Bermann, Gregorio, "El fatalismo y el determinismo en sociología ante los problemas actuales" in *Nostro*, vol. xxxiii (1919) 503-18.

FATIGUE from the practical social standpoint may be defined as a decrease in human working capacity due to increased work. Attempts to increase working efficiency in factory, classroom or elsewhere soon meet with the problem of fatigue. Since the amount of work done is most easily calculated in the number of hours worked, the study of fatigue is usually based upon the

FEUDALISM

EUROPEAN.....	MARC BLOCH
SARACEN AND OTTOMAN.....	ALBERT H. LYBYER
CHINESE.....	O. FRANKE
JAPANESE.....	K. ASAKAWA

EUROPEAN. The adjective *feodalis* (relating to the fief) and the French substantive *féodalité*, used in the restricted sense of a quality peculiar to a fief, date the first from the Middle Ages, the second probably from the sixteenth century. But it was not before the eighteenth century that the custom arose of using for the designation of a whole system of social organization either compound expressions like feudal regime, government or system or, a little later, abstract substantives such as *féodalité* or feudalism. German historians in general have adopted *Lehnwesen* from *Lehn*, the German equivalent of fief. The extension of the use of a word derived from a particular institution, the fief, which can scarcely be considered the central and only significant institution of feudalism, to characterize the social regime prevailing widely during the Middle Ages, and more particularly from the tenth to the thirteenth centuries, in the greater part of western and central Europe is mainly attributable to the influence of Montesquieu. Although Montesquieu considered the establishment in Europe of "feudal laws" a phenomenon *sui generis*, "an event occurring once in the world and destined perhaps never to occur again," modern sociologists and comparative historians have detected in other civilizations the existence of institutions analogous to those of the Middle Ages. Consequently the term feudalism has come to be applied to a mode of social organization that may recur in divers forms in differing periods and environments. Mediaeval European feudalism nevertheless remains the model of all feudal systems as well as the best known.

The origins of the European feudal regime have too frequently been discussed under the form of an ethnic dilemma: are they Roman or Germanic? As a matter of fact the social type that is called feudalism was born in Europe of conditions peculiar to the society from which it sprang. Since feudal society did not stamp itself upon a clean slate, but evolved little by little through the slow adaptation and modification of older usages, it is not difficult to discover in it traces of earlier systems of organization. But these elements were borrowed from very diverse environments. The feudal vocabulary itself, which combines Roman elements—one of

them, the term vassal, taken by the Romans from the Celts—with Germanic elements by its very medley represents the singularly mixed character of the society in which feudalism took its rise.

The most remarkable characteristic of the western world at the beginning of the Middle Ages was the fact that it had been constituted by the encounter and fusion of civilizations existing at very unequal stages of evolution. On the one hand, there was the Roman or Romano-Hellenic world, itself hardly a unit in its foundations. For under the apparent uniformity of the imperial façade many local usages persisted which imposed conditions of life at times quite dissimilar upon the various social groups. On the other hand, there was the still comparatively primitive civilization of the peoples of ancient Germany, who had invaded the Roman domains and carved kingdoms out of it.

The bankruptcy of the state represents the most potent fact during this period. Whatever care the kingdoms of the barbarians may have taken to turn to their profit the formidable administrative system of ancient Rome—already, moreover, far advanced in decay at the time of the great invasions—however remarkable an effort at rehabilitation the monarchy of the first Carolingians may have represented after a century of extreme disorder, the powerlessness of the central government to exercise an effective control over a territory much too extensive for the forces at its disposal betrayed itself more and more glaringly, and for a long period after the middle of the ninth century, in a manner truly irremediable. Undoubtedly the reenforcement accruing from the Germanic traditions was not in this regard entirely negligible; the conception of royalty as the appanage of a sacred family, which derived from the most primitive notions of ancient Germany, resulted in a dynastic perpetuity better established than any that the Roman Empire had ever known. The idea of the state—or, more accurately, the idea of royalty—never entirely vanished. Likewise the institutions codified by the Carolingians long continued, more or less deformed, to exercise an influence. Men, however, lost the habit of expecting protection from a too distant sov-

ereign. They sought it elsewhere and supplanted their obedience to the more remote ruler by other ties of dependence. The state tax ceased to be collected and the administration of justice was parceled out among a crowd of local authorities that had little or no connection with a central organism.

Less apparent but not less grave was the disturbance among social groups founded but lately upon a kinship more or less remote and fictitious, such as clan or tribe. It is impossible to ascertain to what degree the tradition of the old clannish relations had been able to survive in Roman Gaul and Italy, although in Great Britain the history of the imperfectly Romanized Celtic lands at the beginning of the Middle Ages shows them still very strong. On the other hand, it cannot be doubted that this kind of social group was of great importance among the German peoples during the period immediately preceding that of the invasions. But the great turmoil of the conquest, together, no doubt, with certain tendencies from within, weakened these ties. Not that kinship relations ceased during the entire Middle Ages to be a human bond of immense strength. The numerous family feuds which jeopardized the active and passive solidarity of groups in all grades of the social hierarchy bear witness to the strength of these ties. So do various institutions juridical and economic. But these ties came to apply only to a comparatively restricted group whose common descent was easy to establish, namely, the family in the strict sense of the word and no longer the clan or the tribe. This group, which made room for paternal as well as maternal kinship, was not very clearly defined and most of the obligations or modes of living imposed upon its members resulted rather from habits and feelings than from legally defined constraints. The ties of kinship continued to exist very powerfully in the feudal society but they took their place beside new ties after which they tended to pattern themselves and to which they were at times considered inferior.

The social environment in which the feudal relations developed was characterized by an economic system in which exchange although not entirely absent was comparatively rare and in which the not very abundant specie played but a restricted role. It has sometimes been said that at that time land was the only form of wealth. This statement needs explanation and qualification. It cannot be denied that the paucity of commercial relations caused the very

existence of every man to depend narrowly upon his possibility of disposing in some way of the resources furnished by a portion of the soil placed under his control. But an important fraction of the population drew its revenue from the land only indirectly under the form of personal service in money or in kind for the use of the land. Moreover, the possession of superior rights to the land was for the possessor in many respects but a means of exercising an effective power of command over the men to whom he conceded or permitted the direct enjoyment of the fields. One of the essential characteristics of feudalism is that prestige and social worth sprang less from the free disposal of property than from the free disposal of human forces. But the difficulty of commercial exchange had a considerable effect upon the structure of society. The absence of an easy flow of sales and purchases such as exists in present day societies prevented the formation of agricultural or industrial salaried classes and of any body of functionaries remunerated periodically in money.

In the absence then of a strong state, of blood ties capable of dominating the whole life and of an economic system founded upon money payments there grew up in Carolingian and post-Carolingian society relations of man to man of a peculiar type. The superior individual granted his protection and divers material advantages that assured a subsistence to the dependent directly or indirectly; the inferior pledged various prestations or various services and was under a general obligation to render aid. These relations were not always freely assumed nor did they imply a universally satisfactory equilibrium between the two parties. Built upon authority, the feudal regime never ceased to contain a great number of constraints, violences and abuses. However, this idea of the personal bond, hierarchic and synallagmatic in character, dominated European feudalism.

Societies before the rise of feudalism already contained examples of relations of this sort. These did not, however, play the preponderant role that they were to assume later. Rural lordship existed in the Roman world and also at least in germ in the Germanic world. Roman society never ceased to give a large place to patron and client relationship. Around the powerful surged a great crowd of persons—at times themselves of high rank—who commended themselves to them. In addition these clienteles included as a general rule numerous former slaves freed by their masters in exchange for certain obligations

of an economic nature and a general duty of fidelity (*obsequium*). Celtic society before the conquest also contained similar groups. In Germany alongside the normal relations that united the freeman to his family, his clan and his people others more transitory had grown up in the form of bands of faithful men of every origin gathered around a chief. Nourished in his dwelling, receiving from him horses and armor, they accompanied him to battle and constituted his strength and prestige. In this way people became accustomed to a certain conception of social bonds which developing in a favorable environment were to give rise to feudalism proper.

The leading features of feudalism in its fully developed form are the system of vassalage and the institution of the fief. As early as the Frankish and Lombard periods a great number of freemen of all ranks felt the need of seeking the protection of someone more powerful than themselves or of securing a decent livelihood by offering their military services to a superior. The poorest became slaves or simply tenants. But all who could cling to their dignity as men legally free and preferred not to lower themselves to the less honorable services which burdened the tenant liable to the *corvée*. They "commended" themselves *ingenuili ordine*. Exalted persons, on the other hand, sought to surround themselves with loyal people who should be attached to them by solid bonds. Thus arose the contract of dependence most characteristic of the feudal system.

In Frankish law, at least, the relations of vassalage were established by means of a formal act to which a little later the name homage was applied (in German *Mannschaft* or *Hulde*). The future vassal placed his hands in the lord's joined hands while repeating a few words promising loyalty, after which lord and vassal kissed each other on the mouth. As this ceremony, probably borrowed from old German traditions, gave no place to any religious elements, the custom early arose of following it up with an oath of fealty taken by the vassal on the Gospel or on relics.

The obligations created by homage and fealty held as long as both contracting parties were alive. They were extinguished upon the death of either. When heredity later came into play it undermined the whole system of vassalage. But heredity itself, as applying to the vassalic bonds, always remained rather a matter of practice than of law. In case of the death of lord or vassal a new offer of homage was in every case

considered necessary to revive the tie. Being attached to concrete forms the vassalic right held bound only the two persons whom the ceremony brought face to face.

The reciprocal obligations of lord and vassal rested upon general simple principles susceptible in their details of infinite modifications and regulated with an increasing precision by local custom. The vassal owed the lord fidelity, obedience in the face of the whole world and aid in all circumstances in which the lord might need it. He supported him with his counsel, assisted him on occasion in his judicial functions and opened his purse to him in case of necessity. Little by little the cases in which this pecuniary aid—also called *tallage*—was legitimately exactable tended to become more defined and restricted to such occasions as the celebration of the knighthood of the lord's eldest son and of the marriage of his eldest daughter, ransom and so on. Above all the vassal owed the lord military service. This form of aid gradually came to predominate over all others.

In return the lord owed his man his protection; he assumed his defense before the tribunals, when there still were state tribunals; he avenged his wrongs and cared for his orphans until they became of age. Besides he assured him a livelihood in various ways and especially in the form of an economic grant generally known as a fief.

In the absence of a salary system there existed but two means of remunerating services. The master could receive his dependents in his own house, assure them food and shelter (*provende*), even clothe them; or he could assign them a piece of land upon which they might support themselves either directly or through returns received from those allowed to work it.

Of "provided" vassals nurtured in the lord's dwelling there were certainly a great number in the ninth and tenth centuries. They were still to be met with in the France of Philip Augustus. But vassals and lords early agreed in preferring the system of allotments of land, which provided the former with a greater independence and relieved the latter from the responsibility of looking after the support—particularly difficult under a rudimentary economic regime—of numerous and at times turbulent bands. Gradually most of the vassals found themselves "housed" (*chasés, casati*). The land assigned to them derived its peculiar features from the fact that it carried with it certain clearly defined services that were to be performed for the grantor. The property thus granted was at first called

beneficium. Then little by little in the countries of Romanic speech which had adopted Frankish customs this term was supplanted (to such an extent that it has left not a trace in the Gallo-Roman dialects) by a term of Germanic origin: fief (*fevum* or *feodum*). The possession of land without obligation to any superior was, after the Frankish period, called alodial tenure. When a freeholder of this kind felt the need of commending himself he was in most cases forced to turn over his holding to the lord and receive it back as a fief. With the more complete feudalization of society these alodia decreased in number.

As the tenure service was a general institution of the economy of the period, there always existed a very great number of fiefs whose holders were not vassals: fiefs of artisans attached to the lord, such as painters and carpenters; of servants, such as cooks and doorkeepers; of officials charged with the administration of the manors, such as mayors and provosts. But any land granted to a vassal could be only a fief. Little by little, in proportion as the class of vassals tended to be transformed into nobility their fiefs appeared of a superior condition to those that were encumbered with humbler services, and eventually the jurists inclined to regard them as the only true fiefs. The institution of the fief, like that of homage, retained its personal character and was effective only for the lifetime of the contracting parties. Whenever either of them died the concession had to be renewed in the form of the symbolic tradition of investiture. With the establishment of the hereditary principle this ceremony became the means whereby the lord collected a sum of money (relief) as the price for the renewal of the fief.

On the other hand, it frequently happened that the vassal himself disposed of the very fiefs he held from a superior lord as fiefs for his own men. This subinfeudation, in principle, presumed the assent of the grantor of the original fief, but social necessities made it more and more customary to dispense with this. Thus alongside of and to a large extent parallel to the chains of personal dependence there arose chains of landed dependence. Mediaeval law in contrast with the Roman and modern notions of landed property conceived the soil as being subject to a great number of real rights differing among themselves and superimposed. Each of them had the value of a possession protected by custom (*saisine*, *seisin*, *Gewehr*) and none was clothed with that absolute character which the word property carries with it.

The seignior, or manor, was the fundamental unit of the feudal regime. Under the name of villa it was very widespread in Gaul and in Roman Italy and in both cases doubtless went back to very old traditions such as those of village or clan chieftains. The seignior usually consisted of several small farms. The cultivators were not the owners of the land but owed various duties and services to a lord who exercised over them a general power of command and from whom they held their lands on condition of a renewal of the investiture and the payment of a certain sum with every mutation. Generally in the Frankish period the lord also possessed a vast farm, the demesne, whose cultivation was assured in large part by the *corvées* due from the tenants. After the twelfth century these demesnes, chopped up into small farms, decreased in importance, first in France and Italy, more slowly in Germany, and the lord tended to become a mere receiver of land rents.

In gathering round the seignior humble folk obeyed the same need of protection that men of a higher rank sought to satisfy in vassalage. The small peasant handed over his alodium to the lord and received it back under the form of a tenure with dues and *corvées* attached. Often he pledged his person and that of his descendants by the same act, thus entering into personal service. The life of the seignior was regulated by custom. As the lords had every interest in keeping their lands peopled, the habit speedily arose of considering the peasant tenures, even the servile ones, as hereditary. Again, the seignior fortified itself in the feudal period by appropriating a great number of state functions and by assuring the remuneration of the military class, which tended to rise above the others.

The churches figured among the principal possessors of seignories. Some of them from the end of the Roman Empire obtained the right to retain the taxes levied upon their subjects. These privileges, confirmed and extended to churches more and more by the Frankish sovereigns, were the first form of immunity. This soon carried with it another advantage: the prohibition of representatives of the law—exacting and prone to be tyrannical—from trespassing upon immunized land to exercise their functions, notably their judicial powers. Analogous immunities were early obtained by lay lords.

In theory the men who lived upon a seignior thus privileged remained answerable to the royal courts; their lord was responsible for their appearance. In reality the lord more and more

tended to become a judge; he always had been so for his slaves, who at least in their relations to one another and to their master were answerable by the nature of things only to him. On the other hand, his role as protector seemed to confer upon him the right to maintain good order among his free tenants and his vassals. Under Charlemagne the state itself considered his intervention a guaranty of good order. After the fall of the Carolingian state the judicial power of the lord found a new lease of life in the usurpation of public functions, itself the consequence of the utilization of vassalage by the sovereigns.

In the Frankish period all freemen were liable to military service. But more and more the strength of armies seemed to center in horsemen equipped with complete armor and serving as leaders for little bands of other horsemen and of footmen. To remunerate the services of these knights, who accompanied them to the royal army or aided them in their blood feuds, the noblemen had acquired the habit of distributing fiefs among them; and, to make sure of their fidelity, of requesting homage. The sovereigns soon did the same. Notably Charles Martel, engrossed in his struggle against the Arabs and domestic enemies, created numerous military fiefs, carved largely from the domains of the churches which he usurped. Commendation, which had in the beginning been a sure means for men of every class to find a protector, tended thus to become a social tie peculiar to a class of military vassals (of the king or the nobles), who were at the same time possessors of seigniories. By a parallel tendency the old ceremony of the delivery of arms, a heritage from Germanic traditions originally distinguishing the majority of all freemen, now applied only to specialized warriors. This was the "dubbing"; whoever had received it could give it in his turn and thereby make knights. This class, until the twelfth century still open to adventurers of every origin, had an ethics of its own, a code of honor and fidelity tinged more and more with religious ideas, and felt itself to be virtually an order.

On the other hand, to reward their representatives throughout the country, in particular the counts, the kings, not being able to put them on salary, distributed fiefs among them consisting either of lands or of a share of the royal revenues in the provinces. To bind them by a tie that had some strength they chose them from among their vassals or exacted homage of them. The royal vassals in their turn and the churches surrounded themselves with their own vassals and

confided to them a part of their functions and the administration of a part of their property.

Social and economic conditions thus made for decentralization and produced a veritable parceling out of all the powers of the state, such as justice, the right to coin money, tolls and the like. The profits accruing from these powers fell not only to the former direct representatives of the state, such as the counts, or to the immunized churches, but also by a sort of secondary appropriation to the representatives of these first usurpers.

The introduction of the principle of heredity into the feudal system was of paramount importance. The lord, who had need of men, sought to retain the services of the dead vassal's sons. The vassal's son was usually quite willing to do homage to his father's lord, in whom he found a natural protector. Above all it was at this price alone that he could keep the ancestral fief. In fact heredity was adopted little by little as a rule of conduct demanded first by public opinion, then by custom, and the lord who demurred ran the risk of offending his men. Charles the Bald considered it to be normal. In Italy the emperor Conrad II established it as law for fiefs below those of a count. Neither in France nor in Germany was it ever the subject of any legislation. In France it was early made general with but few exceptions and in Germany it was adopted more quickly for fiefs of a lower order and more slowly for fiefs of greater importance.

At the same time that they became hereditary the fiefs tended to become alienable. Of course the lord's assent would always be necessary for alienation. But it became less and less admissible to refuse it. The fiefs, together with the authority attaching to them and with the fragments of state functions that often went along with them, became hereditary, resulting in a confusion of powers over men and things. Heredity, however, while it put a seal on the feudal system certainly compromised its very foundations.

In all consistency the vassal system would have required each vassal to have but one lord. That was the very condition of the entire devotion which was the first of his duties, and the Carolingian legislation had so decided. But it was a great temptation to take fiefs wherever one could get them; when the fiefs had become patrimonial it sometimes happened that a vassal received by inheritance or purchase a fief that was held from some lord other than the one to whom he had first done homage. Cases of vassals of

two or more lords are found from the tenth century and they become more numerous in the later period. How was one to apportion obligations to the various masters? In France in the eleventh century the custom arose of choosing one of these allegiances as more binding than the others. This was called liege (pure) homage. But in the thirteenth century this system, in its turn, was rendered ineffectual by the very multiplication of the liege homages offered by the same vassal to different lords. One was then reduced to consider, among the liege homages, which always took the first place, and, among the simple ones, the first homage in date, or sometimes the one attached to the greater fief as the strongest. In Germany and Italy, where the liege homage never took root, these classifications by dates or according to the importance of the fiefs had always been in vogue. But such multifarious allegiances could no longer count for much.

An essential characteristic of the feudal contract was the theory that if one of the two contracting parties broke his pledges he thereby freed the other party from all obligations. But precise definition as to the circumstances under which non-fulfilment of the contract, whether on the part of the lord or of the vassal, justified the rupture was completely wanting. In spite of the efforts of Carolingian legislation this salient point remained vague. The absence of all recognized superior authority left it to the interested parties to arbitrate the particular case. This uncertainty, the unforeseen consequence of the synallagmatic character of the bond, smoothed the way for all kinds of felony.

Although the salient features of the feudal regime were very nearly the same in all countries of western Europe there were, nevertheless, certain national differences and peculiarities. Thus in France the parceling out of the powers of the state, notably the appropriation of justice, was carried farthest. There too the military class became most solidly constituted and developed its chivalrous code, which from there spread over all Europe. In Germany feudal conceptions did not pervade the judicial life so profoundly, and two codes of customary law developed side by side, the general laws of the different countries (*Landrecht*) and the laws of fiefs (*Lehnrecht*). The alodia there, as in Italy and the south of France, persisted in greater numbers than elsewhere. The exclusive right to invest the superior judges who dealt with criminal cases involving the death penalty remained in

the hands of the royal power. The emperors also maintained a long and effective struggle against the inheritance of the great fiefs. But they had to accept the obligation to enfeoff again the fiefs having the powers of earldoms when they were left without heirs or had been confiscated. This, unlike the case of France, prevented the increase of the royal domain itself. In Italy the previous importance of the cities and the urban habits of a great part of the knights themselves early created a formidable rivalry to the powers of the landed lords.

In Russia a real feudal regime was in full process of development up to the moment when it was stifled by the power of the Muscovite state. As in the west, the vassalage of the boyars became transformed into a state nobility. They were, however, more strictly subject to the czar since the synallagmatic character of the contract of service had always been less marked than in the west. The seignior, vigorously constituted, survived for a long time. In the Byzantine state of the first centuries there existed tenures burdened with military service for the state but these were tenures of peasant soldiers. The emperors viewed these free peasants as constituting the strength of the army and struggled against their being crushed by the seigniories. From the eleventh century their resistance weakened and finally the seignior, favored with immunities and obliged by way of compensation to furnish soldiers to the state, became the keystone of the military organization. But these seigniories were not themselves subdivided in hierarchical form by bonds of fiefs and vassalage; so that one of the essential characteristics of feudalism—that gradation of obligations which in Europe preserved the homogeneity of the political organization—was always lacking in Byzantium. The Scandinavian peninsula offers a clear case of a country in which for want of one of the primary elements of feudal organization, that of seigniorial economy, a real feudalism failed to arise.

Much more significant is the distinction between countries in which feudalism had grown up spontaneously and those in which it had been planted by conquest. In the former the feudal regime was never able to attain that systematic character that hardly belongs to any but institutions formed fully accoutered and thereby unembarrassed with survivals. It appears, on the contrary, as a much more symmetrical edifice in the countries in which it was planted by conquest, such as the Latin states of the Holy

Land, the Norman kingdom of southern Italy and especially England.

The social condition of England at the time of the conquest was in many respects analogous to that of Frankish Gaul at the time when the feudal system began to take shape. Both were marked by a slow absorption of the free peasants in the framework of a seigniority whose dependents still obeyed juridical statutes of extreme variety, by a tendency toward the generalization of dependent relations, by the appropriation of justice by the powerful, by the existence of tenures burdened with military service and called as in Germany *Laen*, and by the importance of the thanes, a class fairly similar to that of the Frankish royal vassals. But all that was poorly coordinated and the fusion of the relations of fief and vassalage had not been effected. The Norman kings imposed upon the country a feudal system conceived to their advantage. The boundaries of the seigniories (called manors) were definitely fixed; a sort of serfdom was introduced which, however, was in the course of time to evolve in a very different direction from the French; in spite of the much greater power of royal justice than in France the English lords were considered the exclusive judges of their tenants in their relations with them, which was finally to prevent the inheritance of tenures. Above all, the kings divided the whole country into military fiefs according to a system brought over from their Norman duchy. The tenants in chief were each to furnish the king with a certain number of knights. To be able to do so they distributed fiefs in their turn. But these chains of dependence soon becoming practically hereditary all led back to the king, from whom in the last analysis all land was held, even that of the church (under the form of the "free alms"). The alodium, a foreign body in the feudal world of the continent, did not exist at all in England. Finally, the king could demand the oath of fealty of his vassals' vassals.

At the end of the twelfth century a profound change took place in European society characterized by the formation of classes, economic transformations and the development of the state. In the tenth or eleventh century society consisted primarily of groups of dependents. As the sense of personal ties wore away, the human mass tended to organize itself in large classes arranged in a hierarchy. Knighthood became hereditary and changed into nobility. In England indeed the noble never had precise lawful privileges clearly separating him from the free-

man. In Italy, habituated to a kind of life increasingly urban, he was hardly to be distinguished from the rich burgher. In France, on the contrary, the nobility made of itself a single closed class to which only the king could introduce new members. In Germany a whole hierarchy established itself within the nobility, and according to the theory of the *Heerschild* no member of one of these subclasses could without derogation accept a fief from a man occupying a lower grade.

Beginning in the twelfth century economic exchange became more active. The cities developed and relations quite foreign to the feudal type came to light. Bound to his fellow townsmen by an oath of mutual aid, which unlike the vassal oath united equals, the townsman needed no other protector than the community to which he belonged. His social code too was quite different from that of the military vassal. Moreover, the advent of a new economic regime founded upon exchange and money payment permitted the extension of the salaried class and at every step of the social scale took away from the fief and the enfeoffment any *raison d'être* for their functions.

This economic transformation in turn contributed to the rebirth of the state. Hired troops took the place of the vassals, who nearly everywhere had greatly succeeded in limiting their obligations. Corps of salaried officials subject to dismissal were formed. Such concentration of power did not redound solely to the advantage of the kings. In France and Germany certain royal vassals had brought under their control a great number of earldoms and multiform seigniorial rights and exalted their power above the crowd of lesser seigniories. While in France the great principalities thus formed were at last absorbed by the royal power, in Germany they well nigh annihilated it. In Italy the states formed around and by leading cities chiefly benefited from this movement. Everywhere the state, whatever its nature, was henceforth a master and protector. He who now depended only on it without "commending" himself to anyone no longer felt isolated.

The rural seigniority lasted much longer. Being adapted to the needs of the capitalistic era it still continued to flourish throughout the sixteenth, seventeenth and eighteenth centuries; it was transplanted by Europeans into various colonies, notably French Canada. It was not abolished in France until the revolution; it disappeared definitely from Germany—aside from a

few survivals—in 1848; in England it disappeared but very slowly from the statute book and left behind a very strong imprint on the constitution of rural society.

The same needs from which vassalage took its rise long continued to make themselves felt, at least intermittently in troubled periods. The homage, now but an empty rite, had its substitutes. The English liverymen in the time of the Wars of the Roses are reminiscent of the mesne tenants of the early Middle Ages. In the France of the seventeenth century to belong to a great lord afforded the gentry the best means of getting on. The orders of knighthood were invented by the princes at the close of the Middle Ages to insure the fidelity of those admitted to them; Napoleon himself in establishing the Legion of Honor had much the same idea. But those orders that have survived, as well as their contemporary imitations, have lost every role but that of honorific distinction.

In the last centuries of the Middle Ages the states had sought to turn to account the old feudal organization, requiring of vassals if not an active military service at least a compensatory tax. But these attempts had little success. In England a law of the Commonwealth in 1656, confirmed by the Restoration in 1660, abolished all distinction between the fiefs of knights and the free tenures (*socages*). The fiction that all land is held from the crown, the use of the word *fee* to designate the highest form of landed rights, are relics of the systematic organization introduced by the Norman kings; primogeniture applied in the absence of a will to all succession in real estate is a legacy of the law of fiefs. In certain German states, such as Prussia under Frederick William I, the fiefs were transformed into *allodia* in the eighteenth century by legislative action. France waited until the revolution of 1789 to abolish fiefs and vassalage, which had ceased to bring any considerable revenue to the coffers of lords and king. In the nineteenth century these antiquated institutions finally disappeared in Europe. The class of military vassals had given birth to the nobility. In France the latter saw its privileges completely abolished along with the feudal organization itself, and by the same act its social role was doomed to extinction. But in some other countries it has long outlived the fiefs both in fact and in law.

The clearest legacy of feudalism to modern societies is the emphasis placed upon the notion of the political contract. The reciprocity of obligations which united lord and vassal and caused

with every grave dereliction by the superior the release of the inferior in the eyes of the law was transferred in the thirteenth century to the state. Practically everywhere, but with peculiar clearness in England and Aragon, the idea was expressed that the subject is bound to the king only so long as the latter remains a loyal protector. This sentiment counterbalanced the tradition of royal sanctity and finally triumphed over it.

MARC BLOCH

SARACEN AND OTTOMAN. The conditions which gave rise to feudalism in Moslem countries varied fundamentally from those under which it arose in western Europe. The economic basis of western feudalism was a natural economy, while the economic organization of the East resembled more closely a money economy. In the West the feudal system had its roots in the problem of military protection, whereas the Moslem military fiefs developed not as a means of insuring military protection, but as an abuse of the existing system of revenue collection. In the Saracen Empire of the ninth century feudal disintegration was apparently more an effect than a cause and was the result of a decline of capacity in the ruling house, corruption in the central government and the influence of mercenary soldiers.

Feudalism in Moslem countries grew out of the administration and the disposition of lands conquered by the Arabs. Governors were appointed to rule over the conquered provinces, which were known as the governors' *ikhtā'*. At first fiscal and political administration were kept distinct. The provinces paid a fixed tribute which was farmed and was in charge of the financial administrator, called the *'āmil*. With the weakening of the central government the provincial governors succeeded in becoming financial administrators as well, and as soon as this fusion occurred independent states and dynasties grew up. Egypt under the Tulunids is the most outstanding example of this process.

A similar disintegration was taking place within the provinces. In the tax districts the administration of taxes was divided between the village communities, which were collectively responsible for their taxes, and the great Arab landholders, called *muktas*, to whom the government had assigned in return for a fixed rent or tax the uncultivated lands and those deserted by their former owners. The tax farming system extended through the districts and village com-

a military leader both on the offensive and in defending the colony from invaders.

GUSTAVE LANCTOT

Consult: Le Sueur, W. D., *Count Frontenac* (Toronto 1906); Lorin, H., *Le Comte de Frontenac* (Paris 1895); Myrand, E., *Frontenac et ses amis* (Quebec 1902); Parkman, F., *Count Frontenac and New France under Louis XIV* (Boston 1877); Colby, C. W., *The Fighting Governor* (Toronto 1915).

FRONTIER

AMERICAN HISTORY. Apart from the meanings generally given to the word frontier it suggests an important theory of American history. Until 1893 the word had been often applied to political or military borderlands or to a twilight zone within which creative thought might be expected to reveal new truths. In North America it had been connected with the region lying at any moment between the settled portions of the continent and the region of untouched nature and aboriginal man. As "the West" it had aroused curiosity and had drawn observers, a few of whom had glimpsed the idea which Frederick Jackson Turner, then a professor in the University of Wisconsin, formulated in his monograph, *The Significance of the Frontier in American History* (1893). Turner had been studying the occupation by English speaking settlers of the region just beyond the Appalachian watershed, using the unique collection of manuscripts, assembled by Lyman C. Draper, which belong to the State Historical Society of Wisconsin. He saw a possible meaning in the fact that here for the first time in modern history, if not in all history, a people with an advanced culture found itself living next to an unlimited area of unowned or slightly valued land, from which the common man could capture for himself what he needed and upon which he could build, free from most of the restrictions of congested society, what personal life he was capable of and what social structure he desired. This hypothesis gave a new and important meaning to the history of the United States. It remains unproved, as must most hypotheses in the philosophy of history; but its reasonableness and its capacity to give a rational interpretation to events have brought about a rewriting of the whole American story in its terms. Only Edward Channing among the major historians has escaped its influence; and he although distrusting it as an explanation made no attempt formally to disprove it. Many historians in varied fields have been inspired by it to examine the frontiers of South America and of Russia and the remoter

frontiers of antiquity and of Europe in the Middle Ages but with results less startling than those which Turner suggested.

The special conditions which made possible the episode of the frontier in the experience of the United States include an English policy which permitted the easy emigration of dissatisfied individuals during the period between the planting of Jamestown and the end of the French wars; the scarcity of exploitable wealth in those parts of North America to which British emigrants had access; the river systems of the Atlantic seaboard, which assisted penetration inland from the coast; a sparse aboriginal population, reduced to fractional dimensions by the frontier of European disease which preceded the English entry, and the partly cultivated areas upon which Indians had dwelt, which indicated sites for residence and made easier the first steps in occupation; and the adoption by the United States of a land policy encouraging the speedy appropriation of the land by small holders.

Without the free emigration permitted by England and the generosity of English law that gave to overseas colonists the rights of Englishmen the English settlements in America might not have escaped the course followed by Spanish and French settlements. These latter failed to set up in the New World detached fragments of the parent country. New France and New Spain were new cultures rather than transplants; whereas New England and Virginia were old cultures with only such modifications as time produced and as environment and neglect encouraged. There was little desire among the powerful of the Old World to capture and appropriate the resources of the English region, for the resources were cheap and at that obtainable only at the cost of bitter labor. Attempts to build up American estates, such as those of the Penns and the other proprietaries, were unprofitable. The cost of protecting the rights of an overlord was out of proportion to the profit to be derived; and from the beginning of settlement the settler was an uneasy underling. However tractable he may have been at home (and most of the settlers were people with little tradition of wealth or dignity), the colonist in America became an aggressive individualist who ignored restrictive laws or perverted them to his own use. It was not profitable for anyone in England, whether with property right or with governmental authority, to make the effort to reduce the farmers of the American frontier to a lock step with vested interest.

The farmer of the frontier has especially interested those who have studied frontier influence. The other frontiers in advance of British civilization in America were anticipatory to his, but had the farmer not followed to convert the country to agricultural use the other frontiers would have lacked meaning. Before him in succession spread the frontiers of exploration, of military control, of missionary activity, of the fur trader and trapper. All of these had been preceded by a deadly frontier of European disease; after them came frontiers of local government, of railroad penetration, of financial sufficiency. But the agricultural frontier, with a new and sparse population of from two to six inhabitants to the square mile, was the significant frontier agent.

The influence of American frontier life was dispersive, throwing the individual upon his own resources: he was probably more than normally willing to be thrown upon himself, because in many cases the English who selected themselves for emigration were in some way more stubborn than their relatives who remained at home. Most of them came from economic motives to find a larger life. Mingled with them were others, nonconformist by temper, who preferred to pay the price of comfort for the opportunity to live politically, religiously or socially as they pleased. England was more comfortable with them gone; and they were not the raw material for an acquiescent dependency three thousand miles away.

Amid frontier conditions such emigrants set up on the Atlantic coast in the seventeenth century a new England which began at once to deviate from the standards of old England, the deviation not being recognized until it had gone too far to be checked. The first frontier was of necessity on the coastal plain with urban concentrations at suitable harbors where immigrants might land and whence exports might be moved. In successive decades the Atlantic ports of entry developed as the centers of business and government, and successive increments of settlers found their way along the river valleys to where coastal plain and piedmont meet and to the mountain valleys behind. The major rivers led to the obvious gaps, with the Susquehanna and the Potomac marking the chief routes to the valley system of the Appalachians. Once beyond the piedmont edge the standard channels of penetration broke down, and settlement was dispersed northeast and southwest in directions generally parallel to the seaboard. The mountain

valleys became a mixing basin for social contributions from all the colonies and for all the races that had a part in the process.

At every stage of its advance on the cutting edge of the frontier was the single family farmer, whose cabin on the margin of settlement was a nucleus whence spread the occupation of the wilderness. From the time when the earliest resident made his appearance to build a home until the time some twenty-five years later when his first born child left home to repeat the process, there developed a typical cycle of events that has repeated itself *mutatis mutandis* in nearly every county in the United States and in every decade from 1600 until 1900.

The repetition of the frontier cycle over small units for three hundred years constitutes an approximation of a series of laboratory experiments in social establishment. The free farmer doing his own work and accomplishing only what he and his family could encompass faced the task of creating farm and home. He was remarkably free from the restrictions of precedent, the dead hand of property interest and the retarding influence of information. He could never be persuaded that he had not in fact made his farm himself; and he never willingly admitted that he owed to any jurisdiction a price in payment for his land. He had few pieces of wealth worth taxing and scant willingness to submit to the imposition of any tax not convenient to pay or not imposed for a benefit that he appreciated. During the twenty-five years of the cycle in any region the land passed from wilderness through a stage of scattered farmsteads and became an agricultural community with county town, roads and schools, institutions of government and a partnership share in a nation. No individual who lived through the process could avoid being shaped in some ways by his experiences. His life, his mentality and his ideas of business and government all tended to derive from the experiences of working with fresh materials and in new units. Social creation was going on, not accomodation to the matrix of an accepted and dominant existing civilization.

The racial components of the wave of immigrants whose labor cleared the continent up to the Appalachian watershed by the middle of the eighteenth century were various with variations that tended to lessen before generations of common life and experience. The English came first carrying the intellectual cargo of seventeenth century England, with notions of common law, free church and controllable government natural

to the century. They planted Virginia and New England, worked their way into control of the little settlements of Dutch and Swedes, occupied the shores of the Chesapeake and Delaware and began the easier cultivation of the southern coastal plain in the Carolinas. Early in the eighteenth century the Germans came, made ready for emigration by starvation and persecution in the Rhine valley, and settled west of the English counties of Pennsylvania and in the Mohawk valley above Albany. By their side the descendants of the Ulster Scots came from the north of Ireland, and from the rest of Ireland and Scotland came enough residents to give to each race a distinct part in the development of the American frontier. On that frontier or, more precisely, on those frontiers in the second and third generations there was admixture of blood that lessened the significance of racial origin and enough concealment of names by marriage or by translation to render forever impossible the task of separating the new race of Americans into its racial stocks. The Scotch-Irish moved beyond the English and the German settlements to cheaper lands and between 1763 and 1819 contributed typical farmer volunteers along the cutting edge of the advancing frontier line.

For a century and a half after the first plantations the frontier in America was a European frontier which had sprung directly from its European base. By the middle of the eighteenth century, when England drove France from the continent and proceeded to reorganize the colonies and to erect controls over the direction and speed of occupation of the land, there was an American social base in the older colonies against which for the remainder of the frontier period it is possible to measure the changes brought about by exposure to frontier life. After the Peace of Paris and the Proclamation of 1763 it became more and more an American frontier.

Among the causes that produced the separation of the United States from England was the English decision to interfere with the occupation of the interior of the continent. Regulations were in vain; Americans defied them without qualm. The common problems of the colonists became clearer along the border than they were among the separatist seaboard establishments. The common lands in the west, gained at the treaty of peace, nearly wrecked American federation; but that once accomplished they constituted one of the earliest forces to give to the new government a national aspect whether under the Articles of Confederation or under the constitu-

tion. Repeatedly after the inauguration of Washington new political movements originated in the west or gained there a force, undiluted with doubts, that made them impressive. Continuously the west drew from the young, the ambitious and the poor to recruit new frontier settlements. The people of these settlements had energy and unanimity in pressing their demands for measures of relief upon the government, which they regarded as essentially national.

As the process of occupying the continent continued under the constitution, the repetitions of the creative process of the frontier cycle operated as a filter upon the ideas and the institutions of the older east which were transplanted and modified in the governments of the newer states. There were few restrictions upon the type of government that the new states might erect. There dropped out of sight among the western states many of the qualifications which the eastern colonies had inherited from their English background. Manhood suffrage and eventually woman suffrage took foothold in the west. Free schools and state education gained ground. Qualifications for elective offices were whittled away. There was a definite political liberalism and a practical democracy that led the west and its leaders not only to erect progressive governments for local use but to wage war against what were regarded as the conservative and aristocratic habits of the east. The parties of Jefferson, Jackson, Harrison, Lincoln and Bryan indicate, in turn, waves of political emotion for which the west on or near its frontiers provided breeding grounds. Each advanced from the west toward the east as its philosophy gained a national acceptance.

The typical frontier cycle appeared with the first settlements on Atlantic tidewater and it repeated itself so long as there remained land capable of development by the cabin farmer. By 1800 the frontier states touched the Mississippi. By 1821 nearly the whole of the United States, as the boundaries then were, was occupied by states or prospective states; what land remained beyond the western boundary of the new state of Missouri was generally regarded as incapable of sustaining the typical agricultural life. Within the next thirty years the political boundaries were projected to the Pacific, the western coast was discovered to be both habitable and desirable, and much of the intervening country was held to be too good to be left to the primitive usages of aboriginal man. New tools were necessary to reclaim the trans-Missouri and to

bring it within the reach of the frontier farmer; but new industrial methods in the mid-century provided them. By the date of the census of 1880 the statisticians of the government were prophesying the speedy disappearance of free land. By 1890 the American frontier in its special sense was gone; more than gone, since in the enthusiasm of the final phases the land had been broken on the high plains and along the slopes of the Rocky Mountains, where it was not normally capable of sustaining the single family farm of American experience. There was a recession of the occupied frontier during the next decade; in the forty years since 1890 farms have not again reached the margin of the greatest development.

With the disappearance of the frontier this episode in human experience came to an end, without precedent and without probability of repetition. It is likely to remain the peculiar part of the heritage of the United States. For three centuries the common American had an easier opportunity to become a free economic agent than did any of his contemporaries. The democratic aspect of American life, its fluidity and its adaptability appear to have some connection with this environment. The American ideology which assumes freedom to be the common lot of man may be a part of it. American restiveness under remote or absentee control seems to derive from it. American suspicion of Europe may be a reaction toward a world whose narrow opportunities made men through ten generations willing to leave its fold. The hypothesis that Turner phrased continues therefore to account for much that is vital in the interpretation of American history and of American status in the world, now that the frontier itself is gone.

FREDERIC L. PAXSON

GEOGRAPHICAL AND SOCIAL ASPECTS. The frontier, or the pioneer belt, is the initial stage in the settlement of a new region by representatives of a stronger civilization. It is characterized by sparsity of population, self-sufficing economy and the crude living conditions and uncouth manners of the less complex cultures. The line of frontier settlement in America was drawn by the Bureau of the Census at a density of six persons per square mile. The frontier is thus a fact of social demography and should be carefully distinguished from the state frontier, which is a political and military boundary (*see* BOUNDARIES). Among the conditions which make frontiers possible are unsettled boundary lines, unexplored and unclaimed territories, virgin soils,

free or nominally priced lands and large or unrestricted immigration. Pioneer belts of historical importance are found in west Australia, South America, especially the Argentine, northwest Canada, Siberia and Rhodesia. They differ from the American frontier largely in possessing lands more subject to extremes of either rainfall, climate or inaccessibility; in leaving less to the untrameled individualism of the settlers and more to governmental policy; and in allowing the unpropertied less access to public domain by requiring for its exploitation a larger amount of capital. Another difference lies in the fact that the present pioneer does not, like the early American pioneer, leave behind him security, but rather the amenities of culture, the artifices of comfort and the power of a more highly mechanized civilization.

The geographical phases of the movement of a frontier may be best studied in the case of America. As population spread from the Atlantic seaboard to the Pacific in a series of successive waves, the frontier expanded not as a uniform belt but in patches and strips. The first to be settled, such fertile and accessible areas as the tidewater, blue grass, limestone valley, black land, delta and prairie, became the centers from which the less attractive surrounding regions were organized as new frontiers. At each advance the reversion to untamed nature and primitive tasks, for which there existed no division of labor and no considerable technology, carried with it a regeneration of frontier modes of life. The vanguard of the advance was led by "long hunters," explorers, trappers, scouts, outlaws, prospectors, gold rushers, Indian traders and *coureurs de bois*. They made the initial contacts with the Indians and learned the folkways of the wilderness. Following these came the main stream of hunters, ranchers, frontier farmers, traders and miners. The frontier, however, did not of necessity recapitulate in its history the orthodox stages of economic organization: hunting, pastoral and agricultural. The Kentucky blue grass, for example, was first settled by farmers who afterward adopted grazing, only to replace it later with diversified farming in which livestock played a large part. As hunting diminished, cow pens, canebrakes and uplands became the centers of a respectable grazing economy, while the ease of settlement in any section whence cattle could be driven to market was often noted. The chief settler was likely to be a squatter farmer with a horse, a cow and a few swine, who settled in a forest clearing, large

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FUNCTIONALISM is a term which came into the foreground of philosophic discourse in the last quarter of the nineteenth century and has maintained an increasingly strong position there ever since. It sums up and designates the most general of the many consequences of the impact of Darwinism upon the sciences of man and nature. This was to shift the conception of "scientific thinking" into a temporal perspective; to stress relations and activities as against terms and substances, genesis and development as against intrinsic character, transformation as against continuing form, dynamic pattern as against static organization, processes of conflict and integration as against formal composition out of unchanging elements. In short, the shift was from "structure" to "function" as the principal tool of scientific explanation and interpretation.

These pairs of antitheticals, together with others of similar intent, express contrasts which experience is everlastingly turning up and of which the classic tradition in philosophy has taken characteristic account. Since the life of man is a sequence of events and not an eternal substance; since it is recorded as biography and history and not as principle or law, it constitutes a flux of experiences springing from an unknown source and flowing to an unknown terminus between birth and death. The concern of the classic tradition was to give character, local habitation and name to the source and the terminus. It used the achievements and practises of religion, of art, of the economic establishment and the political institution as extensions of the unknown. By means of data selected ad hoc from these modes of social interaction and external

adjustment it referred the chances and changes of biography and history to necessary law and immutable substance. It demonstrated every change as an expression of changelessness, every activity as a manifestation of substance. Thus it treated of human nature as immortal soul equipped with unchanging faculties; it treated of nature as substance, as eternal idea or form, unmoved and unmoving in itself but the cause of the motion of all moving things, making them one with its oneness, good with its goodness and true and beautiful with its truth and beauty. According to the philosophic tradition such order and direction as may be found in the dark confusion of experience is an expression or projection into unreality of the lucid structure of the world of substance beyond. Outside of that world the daily life is a dim stream flowing; within, it is no stream. Reason, art, society, salvation are each and all projections or exemplifications of that single order amid the chaos of events. Thus all argument is of a foregone conclusion; all invention only discovery; all technique—whether of government, law or business—only the explication of a priori principles; all knowledge only revelation of a preexisting, self-sustaining and self-sufficient hierarchy of substances; all conduct the exercise, discipline and perfection of unchanging faculty. The oak exists preformed in the acorn, the hen in the egg, the man in the sperm. Growth and change are only expansion and emergence of a structure from its limitations, not the occurrence of new events compounding themselves into a new creature.

This view is held no less by the materialisms of the philosophic tradition than by the idealisms. To both, substance or structure is primary and original, activity or function is secondary and derivative. Functions which were so important in social life that they might not be subordinated were hypostatized. Platonism indeed could well be described as a system of hypostatized functions, extended by the logic of illation to all events of experience; so, for that matter, could Marxism in so far as it holds that history is the dialectic movement of matter to a foregone conclusion. Marxism is in fact a sort of inverted Platonism.

Broadly speaking, the Darwinian hypothesis tended to stand all this on its head. It effected a transvaluation of philosophic and methodological values, lowering the mighty from their seat in biology, psychology, logic, philosophy and the more strictly social sciences and exalting those of low degree. Activity or function, which

had been treated as a dependent variable, a faculty of fixed structure or form, to be defined only with reference to such fixity, now began to receive the primacy formerly accorded to its referent. Function tended to be regarded as the original and to be treated as an independent variable, while structure or form was demoted to second place, a derivative and consequence of the play and sequence of functions. The cumulative effect of this change has been to render substance defunct. In psychology the soul has been replaced with the "stream of consciousness," and the latter with the responses of behavior. In logic the "laws of thought" have been replaced with the theory of scientific method—the techniques of trial and error, doubt, hypothesis, investigation, experiment, verification: the "normative" with the instrumental. Data of psychology were interpreted like those of anatomy and physiology as events in the interplay of two dynamic systems, one an organism reacting to the other, an environment of stimuli among which the first grows but which were not made for it. At first the reactions were regarded as functions in a struggle for survival and were interpreted as survival values. Truth was redefined as the survival value of the processes of cognition, goodness as the survival value of other processes of behavior and so on. The meaning of all events in biography or history was set in their consequences to the fortunes of the organism. Later, however, the processes of behavior were taken sheer, as a sequence of functions, without reference to any subsequent function, as a phase of any activity under observation, without regard to its genesis and without imputation of intent.

The philosophical elaboration and defense of this use of "function" as an instrument of interpretation and explanation is called pragmatism. But the mental posture and the methodology here involved have a wide range beyond any particular school of philosophy. They appear in fact to pervade all the sciences and to suffuse and distort the prevailing philosophies. The reason is probably the fact that the whole trend of the social process since Darwin has been in the direction of functionalism and might be described as its verification and validation. The spread of machine industry with its impersonal automatic engines in continuous action; the tremendous acceleration of the tempo of life by the industrial establishment; the adoption of "efficiency," "service," "progress" and the like as measures of value in the community; all tend

to set up "the functional point of view" both as a cause and as an expression of the temper of the times. Hence even its opposites must assume it to maintain relevancy. In assuming it, however, they distort it to congruity with their own patterns and trends.

The distortion is made possible by the fact that function can be conceived in two ways: as a going process, a neutral mechanism, calling for no external justification and generating its rationale as it proceeds; or as a means to an end, the activities of an agent accomplishing a purpose. In the concepts of survival of the fit and survival value the ghost of the agent still lurked. It made the indifferent processes of Darwinism easy to translate into the purposive direction of Lamarckism and other forms of vitalism, and thus facilitated the absorption of the functional point of view into the philosophic tradition. Function and purpose, varied function and invariant purpose, have always been paired together. But the real animus of functionalism lies in the conception of function without purpose. The traditional philosophies stripped this conception of its essential meaning by means of the organismic interpretation of community and individuality. All such interpretations involve the hypostasis of function into substance. For instead of taking activities at their face value, to observe, describe and measure, the organismal interpretation treats them as a sequence of parts energized and interrelated by a preexisting and unchanging whole called in one connection instinct, in another want or wish, in another organism. It conceives this whole substantially, a being somehow different from their parts and their dynamic interrelations. Bergson, Driesch, Marx and the sectaries deriving from them, contrasted and antagonistic as they are, share this mode of functionalism.

This derives perhaps from the fact that human life as it is lived is a compenetration of survivals, and the past from which the future eventuates is so massive and pervading that willy-nilly old orders assimilate the new into their characteristic patterns. Thinking, which is quite largely a suffusion of new situations with past experiences, operates by folkways and mores of its own. In these substance, if only as a ghost or a *Gestalt*, and teleology, if only as an ideal, are continuously operative. Inevitably specific problems and situations are permeated with those categories which automatically embrace in a defining frame the actual dynamics of conflict and integration, compensation and control,

repression and projection, among an individual's drives and functions and a society's institutions, groups, castes or classes.

Programs of reform and of social innovation exalting function take on a definite color in the light of these observations. Thus guild socialism, syndicalism, communism, Fascism put forward radically conflicting philosophies of society. The first interprets the contemporary socio-economic process by means of an idealized mediaeval order; the next in terms of the Bergsonian *élan vital*; the third through the dialectical materialism of Marx; the fourth is a hybrid of syndicalism and the postulates of capitalist economy. They have in common a rejection of many aspects of the cultural aggregate, such as monarchism, democracy, representative government and the like. Such establishments, they declare, are modes of political operation and control either by parties without any other than the political interest and hence are social parasites or by parties whose interests are aborted or masked. The power which is said to elect government is not the power which actually controls it. Waste and hypocrisy automatically supervene; the social organism corrupts. For health the elective and the controlling power should be identical. So syndicalism and guild socialism propose what communism and Fascism endeavor to accomplish as the communist and corporative states. Theoretically and programmatically such states are organic wholes. All their citizens are organized in industrial unions, soviets or corporations. Each division of an industry constitutes a function within the industry and each industry as such constitutes a function of the state as a whole, integrated with its fellow industries in and through the whole and deriving through this integration all the value or significance they possess. Closely related to these corporative and organismal variants of functional political theory is the recent trend toward pluralism. The chief animus behind the disintegration of the monistic conception of the state is the desire to establish a functional connection between the principle of growth in a group or association and its mechanism of control.

In economics functionalism has taken mainly the form of institutionalism as embodied in the point of view of Thorstein Veblen and his followers. The hates and enthusiasms of Veblen often deviate him into teleology, but on the whole he appears as the most uncompromising functionalist among social philosophers of the last generation. Malinowski appears to be aim-

ing at an equally thoroughgoing functionalism in anthropology, insisting that questions of origins, stages and laws of development in culture are inferential and secondary and must wait upon the discernment of functions. Functions are events going on, operations of bodily needs and the instrumental uses of objects which constitute their cultural character. They are contents of direct experience, susceptible to observation and analysis. Seen functionally, religion, the arts and sciences become reduced to specific habits, materials, meanings, activities, within the context of a cultural situation, and the forms and structures of such cultural objects become derivatives, concretions or deposits of the dynamic relations in play. What ceases to function, ceases to be. In the study of law an attempt is being made in various ways, notably by Pound, Llewellyn, Hamilton and Moore, to adapt the content of the legal principle in the particular decision to the observed character of the functioning economic or social situation. Even architecture has caught the contagion and opposes "functional" building to historic styles, ornamentation and the like. Functional architecture is construction whose form arises out of the uses for which it is intended and reenforces and is reenforced by those uses. It is presumably characterized by the economy, simplicity and elegance that go with perfect efficiency, discarding superfluities and every other mode of obscuring or defeating the maximum of use.

HORACE M. KALLEN

See: PHILOSOPHY; PRAGMATISM; SCIENCE; PSYCHOLOGY; BEHAVIORISM; GESTALT; INSTINCT; ORGANISM; SOCIAL; EVOLUTION, SOCIAL; CULTURE; ECONOMICS, section on INSTITUTIONAL SCHOOL; GUILD SOCIALISM; FUNCTIONAL REPRESENTATION; PLURALISM; LAW; ARCHITECTURE.

Consult: Darwin, Charles, *The Origin of Species* (6th ed. London 1872); Henderson, L. J., *The Fitness of the Environment* (New York 1913); Hachet-Souplet, P., *La genèse des instincts* (Paris 1912); Ritter, W. E., and Bailey, E. W., *The Organismal Conception* (Berkeley 1928); Meyerson, E., *De l'explication dans les sciences*, 2 vols. (Paris 1921); James, William, *Pragmatism* (New York 1907), and *Principles of Psychology*, 2 vols. (New York 1890); Bergson, H., *L'évolution créatrice* (Paris 1907), tr. by A. Mitchell (New York 1911); Dewey, John, *Reconstruction in Philosophy* (New York 1920), *How We Think* (Boston 1910), *Human Nature and Conduct* (New York 1922), and *Experience and Nature* (Chicago 1925); Pierce, C. S., *Chance, Love and Logic* (New York 1923); Kallen, H. M., *William James and Henri Bergson* (Chicago 1914), and *Why Religion?* (New York 1927); Köhler, W., *Gestalt Psychology* (New York 1929); Thorndike, E. L., *Educational Psychology*, 3 vols. (New York 1913-14); Watson, J. B., *Psychology from the Stand-*

ments, which can generally be obtained by writing to the issuing office, but the quality and the quantity vary greatly. In general the eastern states excel considerably in both respects. Miss A. R. Hasse's "Materials for a Bibliography of the Public Archives of the Thirteen Original States" (in American Historical Association, *Annual Report*, vol. ii, 1906, p. 239-561) covers the period until 1789; Miss Hasse has also prepared an *Index of Economic Material in Documents of the States of the United States* (13 vols., Washington 1907-22) covering thirteen states. R. R. Bowker's *State Publications* (4 vols., New York 1899-1908) contains brief descriptive notes. Seventeen states have no bibliography. An excellent bibliography of current documents, the *Monthly Check-list of State Publications* (1910), is issued by the Library of Congress, with an accumulative index at the end of the calendar year. In city publications the east again leads; but some of the western cities, such as Los Angeles, devote much attention to their compilation and distribution. There is unfortunately no bibliography of municipal documents, but the Library of Congress is considering the issue of such a bibliography.

The most ambitious attempt to provide within the compass of one sole publication a *vade mecum* through the intricate field of the documents of all foreign countries is the *List of the Serial Publications of Foreign Governments, 1815-1931*, which is being edited by Winifred Gregory under the auspices of the American Council of Learned Societies, the American Library Association and the National Research Council. It is to be published in 1932. It will include national governments, governmental divisions and states which are at least to some extent self-governing, such as the states of Argentina and Brazil and the cantons of Switzerland. The Reference Service on International Affairs of the American Library in Paris has prepared a useful catalogue of the *Official Publications of European Governments* (mimeographed, Paris 1926; rev. ed. vol. i- , Paris 1929-), which, however, makes no claim to being complete. The more important catalogues for particular foreign governments are: For Italy: Italy, Provveditorato Generale dello Stato, *Pubblicazioni editte dello stato e col suo concorso (1861-1923) catalogo generale* (Rome 1924, and supplement, 1931); Libreria dello Stato, Rome, *Catalogo delle pubblicazioni* (Rome 1931). For Germany: *Monatliches Verzeichnis der reichsdeutschen amtlichen Druckschriften*, published in Berlin since 1928; Berlin, Staatsbiblio-

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HENRY FURST

See: GOVERNMENT REPORTING; STATE PRESS; BUSINESS, GOVERNMENT SERVICES FOR; AGRICULTURE, GOVERNMENT SERVICES FOR; LABOR, GOVERNMENT SERVICES FOR; STATISTICS; ARCHIVES; RECORDS, HISTORICAL; LIBRARIES.

Consult: Childs, J. B., *An Account of Government Document Bibliography in the United States and Elsewhere* (rev. ed. Washington 1930); Boyd, A. M., *United States Government Publications as Sources of Information for Libraries* (New York 1931); Schmeckebier, L. F., *Government Printing Office* (Washington 1925); Horrocks, S., "Government Publications" in Library Association, *Record*, n.s., vol. viii (1930) 93-104, which covers British publications; Fletcher, Angus, "His Majesty's Stationery Office" in *Library Journal*, vol. lii (1927) 461-64; Lees-Smith, H. B., *Guide to Parliamentary and Official Papers* (London 1924); Brown, E. S., "Some Bibliographical Aids to the Use of British Government Publications" in *American Political Science Review*, vol. xxv (1931) 401-05; Schwidetzky, Georg, *Deutsche Amtsdrukssachenkunde*, Zentralblatt für Bibliothekswesen, Beiheft lix (Leipzig 1927).

GOVERNMENT REGULATION OF INDUSTRY. Some form of regulation of the economic activities of individuals or groups by the community appears to be virtually coextensive

with the history of organized society. Although the doctrine of non-interference enjoyed a brief supremacy—mainly in England around the middle of the nineteenth century—it has never completely governed the practise of any modern nation. There have, however, been significant changes in the kind and degree of control, in the philosophy motivating it, in the interests and ideals dominating it, in the practises dealt with, in the forms of authority exercised and in the instrumentalities employed.

In the Middle Ages prevailing theory and practise were marked by distrust of unregulated private acquisition and by a varied assortment of institutions of control in various fields. Authority derived from the church, the guilds, the town governments and the "custom of the manor." The church aside from supporting the obligation of charity prohibited usury and lent its force to the doctrine of the just price. The latter seems to have taken different forms with respect to different classes of commodities. In the case of handicraft products sold within the community of which the maker was a member it represented a protection of the customary standard of living of the maker of the goods. In the case of goods coming from a distance the community naturally assumed no responsibility for protecting the standard of living of the producers. For such goods the just price frequently meant the judgment of a body of men experienced in the trade, taking account of conditions of supply and demand. The craft guilds regulated admission to the crafts, protected standards of workmanship and limited competition between the guildsmen both in buying materials and in selling goods. The town markets, to which outsiders came to sell their goods, were regulated with a view to preventing speculation and corners and preserving direct selling. These regulations included the rules against forestalling, engrossing and regrating—an early counterpart of the laws against monopoly prominent in a much later period, particularly in the United States. Foreign traders were subjected to regulations of a generally protectionist character strongly suggesting the spirit of the later mercantilist systems. The custom of the manor defined the character and to a large extent the amount of the feudal dues and was the chief protection of the villein against arbitrary exactions on the part of the feudal lords.

When the national state took the place of the mediaeval units it continued the general attitude of distrust of free exchange and the policy of control in what it considered to be the interest of

the community. Sovereignty was now lodged in a dynastic-militaristic state with standing armies requiring large sums of money for their support, and the fiscal interests of the state naturally played a large part in the resulting system. This was colored also by the great inflow of specie from the Americas—by the wealth which Spain acquired from this source and by the attempt of other nations to divert to themselves a share of this wealth. The interest in specie led at first to direct and crude restrictions on its export, but later the restrictions were relaxed and the policy of balance of trade was substituted; this harmonized the interests of the dynastic-militaristic state, including the desire for concentration of population and wealth within its borders, with the interest of the growing mercantile class in greater freedom for their trading operations. Mercantilism involved the development of manufactures and of an excess of exports secured by importing crude products and exporting the more valuable manufactured articles. The means included direct stimulation of manufactures and attempts to foster and maintain standards of workmanship as well as systems of protective duties and restrictions on trade. Colonial empires were exploited as sources of raw materials and markets for finished goods with appropriate restrictions on colonial manufacturing. England paid special attention to the development of her navy and merchant marine, using the navigation acts to strike a heavy blow at the carrying trade of her rival, Holland, and fostering fisheries as a nursery school for seamen. In the Germanic states different economic and fiscal conditions led to less emphasis on the mercantile phases of the policy and more on the direct development of efficient methods of production; this policy and the administrative system associated with it were known as cameralism.

The general character of the early economic nationalism was undemocratic and exploitative. The masses of the population and their productive activities were regarded primarily as means for the achievement of national power and greatness; foreign trade was essentially a device to augment national power at the expense of rival states. Such considerations as the mutuality of interests involved in international trade or the greater abundance of goods for popular consumption incident to an increase of production were alien to the dominating thought of the period; they were recognized as unforeseen consequences of economic developments before being set up as conscious goals of economic policy.

The reasons for the development of a new attitude were many and complex, having their roots in the rise to power of new economic interests, in political upheavals and in changing social and political outlooks. The American and French revolutions played a large part; also the entrance into agriculture of more commercially minded landowners and the strengthening of mercantile interests in general; but undoubtedly the decisive force was the industrial revolution. Industry outgrew almost overnight many of the older forms of control, including survivals of local and guild regulations which had persisted through the early nationalist period.

The new attitude was expressed in theories of the beneficence of free private enterprise and of the perniciousness of governmental interference—it is difficult to say which aspect deserves more emphasis. *Laissez faire* theories prior to Bentham were in the main theories of natural rights, in which the correspondence between private interests and the general good was decreed by nature. In Bentham's utilitarian philosophy it was precisely the task of government to bring about this correspondence by attaching the necessary rewards and penalties to individual actions. His was a theory of public control directed to the democratic and humanitarian goal of the good of the greatest number. It is true that in Bentham's view the only control needed to this end was the maintenance of order, the protection of property and the enforcement of contracts; and he thus came to the same results as the believers in natural rights. But he had set up standards of judgment which were destined later to lead to a different answer. What had really been accomplished was the setting up of a presumption in favor of liberty in place of a presumption in favor of control and the profound modification of the standards of judgment in terms of which any proposal of control would be required to justify itself. It was perhaps most typically justified on the ground of the absence of one or more of the conditions necessary to the securing of the proper results from free enterprise. Thus the general theory of individualism was preserved, but as the point of departure for ever expanding policies of control.

In the Germanic countries the doctrines of individualism never took deep root and the cameralistic tradition persisted. The state looked with tacit approval upon and sometimes directly participated in the systematic organization of German industry into cartels; under Bismarck Germany led the world in creating a system of social

insurance. These developments were conditioned by different conceptions of the economic system and of the character of the state. British utilitarianism viewed the economic system as a more or less mechanical articulation of particular interests best cared for by the bargaining efforts of those most directly concerned. And the early British liberals with their democratic and humanitarian ideals did not find in the national government of the Napoleonic era a representative, efficient or safe custodian of economic interests. The Germanic peoples regarded the economic system more as an organic whole and had more confidence in the state as a representative of the organized community.

In the United States during the same period individualistic theory was combined with a regime of high protective tariffs. The regulation of foreign trade by a system of import duties was in fact a major form of government control of industry in many countries. It was adopted by the Germanic states even before political union had been achieved. In France it provided one of the most important issues in the field of economic policy during the nineteenth century, when the liberals regarded the protectionists and the socialists as equally dangerous adherents of state intervention. In England the repeal of mercantilistic corn laws was regarded as ushering in the period of *laissez faire*.

And yet even in England there was at no time complete adherence to the principles of *laissez faire*: the first factory acts—the earliest examples of newer forms of control—were enacted long before the middle of the century. These acts were passed in the interests of labor and were concerned with hours of work, safety and sanitary conditions; the policy which they expressed has been maintained and extended ever since. Other matters in the field of labor soon called for government regulation; of these one of the oldest, most important and most difficult was the problem of labor disputes and labor organization for the purpose of securing better terms of employment. The government could not avoid taking some position on the problem of tactics used in organized bargaining and trade disputes; if only in the course of keeping the peace. The system of regulating wages and the provision of social insurance were of equally great importance, imposing upon industry and ultimately upon the consumer the duty of maintaining minimum standards of living for the laboring masses.

The organization of employers, which in certain of its aspects is part and parcel of the ques-

tion of labor disputes, confronted the state also with a problem in another direction, that of preserving for the consumer the benefits of competition. The approach to this problem varied in time and place. While the Germanic countries encouraged combination, relying upon a variety of measures—from direct governmental participation to regulation of output and price—as safeguards against exorbitant prices, the United States attempted at first to enforce and later to regulate competition. Even before the question of economic monopoly came up, the governments in some countries were forced to deal with the problem of private operation of partial natural monopolies, such as railroads and local public utilities. The tendency of direct control over industry to expand continuously once it has been begun is well illustrated by the development of railroad regulation in the United States. Originally undertaken to prevent extortion and discrimination in rates, it was considerably extended in the course of time; so that at present the Interstate Commerce Commission engages in actual rate fixing, passes upon the issue of securities and the abandonment of old and the construction of new lines, enforces definite standards of service and is supposed to plan and supervise the consolidation of railroad systems. Developments in this field reflect also the shift of emphasis typical of government regulation as it becomes more thorough and comprehensive. In the early stages the dangers of excessive leniency and of allowing too much profit loom foremost in the public mind; later attention is centered more on the potential dangers of cutting off the capital supply of the industry, weakening the incentives to efficiency on the part of management and hindering the prompt adaptation of the industry to changing conditions.

A large number of other forms of regulation were developed during the nineteenth and the twentieth century. Many of these represent an adaptation of controls carried over from the mercantilist era to the new conditions of industrialism. The control of currency, for example, had been the prerogative of the state ever since the beginning of the modern era; after the industrial revolution this control was in most European countries focused in central banking institutions and out of their experience developed such ultra-modern doctrines as that of credit control. Similarly the regulation of corporations had from their inception been vested in the state. The strictness of these regulations varied greatly at different times and in different jurisdictions; it

seems, however, that in this field history is about to complete a circle—even in the United States, where this regulation has for a long time been very lax, the tendency appears to be toward greater strictness in many essential particulars. In the conservation of limited natural resources most of the mercantilistic forms of control still persist; recently they have been supplemented by experiments—none too successful—in the valorization of strategic products. Control of trading in foodstuffs, in some ways resembling mediaeval town regulations, covers the grading and inspection of produce and the regulation of markets. Control of consumption extends to drugs and alcoholic liquors as well as to adulteration and misbranding and the safety of foodstuffs, especially milk. Building is regulated in the interest of safety and sanitary conditions and, in some places, of architectural harmony and appropriateness. Allied to this last is the development of zoning of cities to prevent legitimate but incongruous uses of property from interfering with each other and to promote the rational development of urban areas. Even in individualistic America all these varieties of control are found to some extent and in other countries they have been carried to greater lengths.

In all of this there is scarcely anything new in principle, however bewildering the new forms which control takes or the new interests in whose service it is invoked. To the persisting mercantilistic principles of control have been added others which trace their spiritual kinship to that sense of responsibility for the standard of living of the members of the community which was one of the animating forces of the mediaeval system. The embodiment of this spirit has, however, been given new forms by the rise of new conflicts of interests and new abuses springing from new techniques of production and of commercial and industrial organization; by the substitution of democratic and progressive standards of welfare for the static, customary standards of the Middle Ages; by the contribution of science to the knowledge of human needs and the causes of human ills; and by the development of the modern representative form of government. The whole is set in the framework of a clearer recognition of the benefits of free exchange and the dangers of inept tampering with its operations, while the system of free exchange itself has become vastly more intricate and more delicately interdependent. The task of control has become far more complex and difficult than that of previous ages, and the standards

that guide it more difficult to formulate and to agree upon.

The modern system of control can be analyzed and classified in a number of different ways: according to the interests which it seeks to protect; according to the nature of the threat to these interests or the reasons for the failure of free enterprise to work the beneficent results conceived by laissez faire theory; according to the means employed; and according to the character of the governmental body entrusted with the employment of these means.

It is in the nature of control to be called upon where interests conflict, and the proper adjustment is often far from obvious. Generally the community will try to protect what it regards as the more vital interests, leaving the self-assertion of the less vital interests to the unobstructed interaction of economic pressures and resistances. The United States is perhaps unique in possessing in its constitutional law fairly definite criteria for distinguishing between the more and the less vital; in general it regards the interests bound up with safety, health and morals as paramount over any others which may oppose them, although not to the extent of crippling private enterprise. Thus the consumer's interest in good quality is within the sphere of state protection in so far as quality bears on safety, health or morals; while the less essential matters, such as effectiveness, durability and style, are left to his own judgment. His interest in reasonable prices is also left to competition except in the case of "public service industries," where this safeguard is obviously wanting or ineffective. One interest, however, which is essential in giving the consumer the benefits of such competition as may exist is the interest in knowledge of what the market offers. In these days of synthetic products the education of the consumer needs to go farther than ever before if he is to be able to protect his interests in the purchase of goods.

The interests of men as laborers are more varied than their interests as consumers. Here again the most vital are the interests bound up with health and safety with special regard to the needs of women and children. Less clear is the worker's interest in high wages where there is an obvious conflict with the employer's interest in cheap labor and a scarcely less obvious conflict between the interests of different groups of workers, some of whom may be anxious to get jobs at less pay than others are receiving. Here the growing practise is to set minimum standards on the theory that the public at large has an

interest in such minima and to leave any excess above these levels to the forces of supply and demand. Closely allied to the interest in wages is the interest in security both of income and employment with provision for the special needs of illness and accident. Stability of employment, however, is an interest which governments have not as yet found it practicable to protect. Nevertheless, it is clear that the interests of labor are emphasized by the modern state to an extent which never occurred to its mercantilist predecessor, while the mediaeval economic system contained nothing corresponding to the modern wage earning class. The increasing political and economic importance of this class and the growing spirit of humanitarianism have combined to bring about this result.

An analysis on the basis of the reasons for the failure of free enterprise to work beneficially must begin with the conditions necessary to such beneficial operation. These include: individuals able to determine their own interests both as producers and consumers, to organize their resources and adequately to care for them and to protect and promote them in bargaining; a system of personal and property rights which makes it impossible for any to gain by injuring others, so that every exchange must be to some extent at least a mutual benefit; and constructive competition made possible by the conditions described. Where any one of these conditions is not present the grounds of free enterprise are imperfect and corrective measures are justified, even on the basis of the utilitarian logic of the nineteenth century.

There are obviously many cases in which individuals are not able to judge or to care for their own interest. Minors not adequately cared for by their parents are wards of the state. Women are also objects of special care, not so much by reason of any special incapacity to look after their own interests as because disaster to them is injurious also to the next generation. Further there are many relations in modern economic life in which the normal individual is not in a position to look after his own interests effectively, either because he lacks necessary knowledge which is available to the community or because he is subjected to inequalities of bargaining power which amount to coercion. Moreover it is coming to be recognized that extreme poverty, whatever its cause, creates a condition in which the individual may be forced to sacrifice the needs of the future to the more urgent needs of the present to an extent which is detrimental to

the interests of the community. Community assistance is also called for wherever individuals look after their interests through "delegated agencies" or associative forms of activity, in which the active officials are responsible for other interests than their own. It is precisely this form of activity which, according to the theory of individualism, human nature is not sufficiently developed to handle successfully. The success of corporate business has given the lie to the more extreme pessimism of the economists of the early nineteenth century, but not without revealing many and grave abuses. The pseudo-individualism of large corporate enterprise is not individualism as Adam Smith or Ricardo conceived it and cannot claim the full protection of their theories.

Nor is it true that production consists solely of creating marketable goods and services and inducing individuals to undergo the costs incident to production by offering compensation which is adequate to secure their consent in a freely negotiated bargain. There are many diffused benefits which are never sold and many burdens which are imposed without specific compensation. Industrial pioneering is a matter in which the full benefits are seldom or never collected by those who have brought them into being. The evils of industrial depressions represent the results of business transactions falling in wholly untraceable ways on the economic community as a whole without the slightest possibility of bringing damage suits or collecting compensation from those who are responsible, so far as any human agency can be deemed responsible for the inevitable outcome of "legitimate" business transactions. Here all that can be done is to promote community interests and to minimize or relieve community losses on a non-individualistic basis.

Another clear ground for interference is monopoly, to which should be added many cases in which competition does not act with sufficient force or promptness to afford the individual the benefits he is supposed to receive from it. Under modern conditions the opposite extreme, cut-throat competition, is also regarded by many as a form of sickness in the competitive system, calling for some measures of relief. The cartel affords such relief to the business organization, the labor union to the workers. Both are in varying degree non-competitive and both create a need for such supervision as shall see to it that they do not exercise an oppressive degree of monopoly power.

The methods of community intervention in economic life are quite as varied and offer equally perplexing problems. They range from persuasion, as in the case of President Hoover's conferences with business leaders in the attempt to stem the depression of 1930, to far reaching compulsion, as in the case of commission control of public utilities. Undesirable practises may be prohibited, minimum standards set or absolute standards required as to both price and service. Publicity is often a formidable weapon in combating undesirable practises, and taxation is freely used to discourage various forms of business as well as to mitigate the inequalities of distribution. Arbitration of labor disputes may be voluntary or compulsory as to the submission of the dispute, as to the acceptance of the award or both.

The problem of methods of control is important where burdens are imposed simply in order to assure more desirable conditions to those engaged in the industry as well as a desirable product for the consumers. Care must then be taken that such burdens do not discourage the industry; this need is sharpened where, as in the United States, different jurisdictions set different standards for producers who must compete with each other in the same national market. That such regulation has not produced more serious disturbances is evidence that the burdens imposed have been very far from decisive. There is undoubtedly a considerable difference between imposing conditions which may incidentally increase costs of production while leaving rates of money wages and prices of products free to adjust themselves to the altered conditions, and going to the length of regulating these money payments also and leaving the employers no resource if they cannot overcome the new handicaps by increased efficiency. Where money payments are regulated, much closer consideration must be given to the law of supply and demand. But this law is not a rigid thing, and there is often a considerable margin within which control is possible without seriously handicapping production. Even the fixing of wages at a level which the least efficient employers are definitely unable to pay may operate not to check production but to hasten the transfer of the business to more competent hands—a result which competition should ultimately bring about in any case, but which may be considerably retarded, especially by forms of control over competition developed within business itself.

The type of government agency through which control is exercised varies of course with the structure of governmental machinery from country to country. This applies not so much to those forms of control which are exercised by bodies charged with general administrative functions, such as tax collecting agencies or the customs service, as to the more specific types of control, in which there has been a tendency toward the development of specialized bureaus and departments. A characteristic agency of control in English speaking countries is the administrative commission, whose functions include matters which are essentially legislative, executive and judicial and which specializes in regulating some one industry or class of problems. Labor adjustment has resulted in the joint board, representative of both sides to the controversy; it is either permanent or created for the particular occasion. For the future it may be important that business organization itself is developing representative bodies for self-regulation; these bodies increasingly acquire a governmental character with great possibilities for harm or for good according to the direction taken by the movement. If business forms of government are made adequately representative of all the essential interests involved in the various issues which arise, including political government, they may become an invaluable aid to public policy. Since the World War there has been a pronounced tendency in many European countries to incorporate such bodies in the established framework of political government and to endow them under certain safeguards with powers of compulsion. Elsewhere the assistance of the representatives of various interests and of experts is secured through the agency of advisory boards.

In the United States public control faces special legal problems. The federal constitution delegated only specifically enumerated powers to the central government, the residuary powers of state governments are also limited by the Bill of Rights, and the freedom of action of both types of governments has been further curtailed by the provisions safeguarding private liberty and private property under the Fifth and Fourteenth amendments. The courts have permitted a rather surprising extension of federal action, under authority of the few powers specifically granted, into realms characteristic of the police power reserved to the states. But they refused to permit the use of the taxing power and of the power over interstate commerce in order to enable the federal government to control child

labor. The powers of the state governments have been especially handicapped by the requirement that no person can be deprived of life, liberty or property without due process of law. Liberty and property have been so broadly defined that any effective regulation of economic affairs could be construed as a taking of these intangible values, and its constitutionality could be made dependent on whether it would be held to constitute due process. And due process has been so broadly construed as to cover the question of what subject matter the legislative power may control and what it may not. When the issue was first raised the courts held that it was not the intention to forbid types of power customarily exercised by the states, and extensions of these powers have from time to time been permitted. Judicial attempts to describe the grounds for selection have run mainly in terms of the vital character of the interests protected, justifying control in the interest of the public peace, public health and public morals with room for other matters which may be vital to public welfare. In the District of Columbia minimum wage case the court took account also of the extent of the interference with private liberty, drawing a distinction between control of the "heart of the contract"—in this instance the wage rate—and of incidental conditions. Under the progressive interpretation of the police power advocated by Justice Holmes government would have whatever powers strong and settled public conviction might decide were necessary for it. But this is not yet the law of the land.

Direct regulation of service and prices is permitted in the case of businesses "affected with a public interest." This concept covers the field of natural monopolies, certain industries on a purely traditional basis and a penumbra of other cases in which competition is an ineffective safeguard of service or price. The list is not necessarily a closed one; changed economic conditions may necessitate additions; but legislatures are not free to add any industries they choose. Thus price regulation and the positive power to require the rendering of economic services are hedged about with especially narrow limitations.

The amount and degree of control practicable in times of peace dwindle to insignificance when compared with the lengths to which control may be carried in war time, particularly during a conflict on so large a scale as the World War. War not only provides the emergency which sweeps aside all ideological and legal limitations to control; it provides the force of patriotic motive and

public opinion which puts much of wartime regulation virtually on a consent basis. Moreover war introduces a criterion of what is most essential which is quite independent of market values; no similar criterion exists in ordinary times of peace. And wartime control of prices is typically content with cutting off the peak of profiteering while still leaving profits ample to stimulate the utmost expansion of production in essential industries. There is little care to prevent profiteering in non-essentials; but when the time is ripe for effective action, supplies of fuel and materials are cut down or cut off. On the whole wartime and peacetime controls are fairly distinct. During a war the wastes and perversions of public control are less serious than the wastes and perversions to which free private enterprise would subject the warring nations; this would not, however, necessarily validate the same amount of control in times of peace.

The chief substitute for governmental control is governmental operation. This may be employed in the case of industries whose stimulation is undesirable, such as the manufacture of alcoholic liquors; or for revenue purposes; or where private enterprise will not furnish essential services; or simply as a means of furnishing service without profit. Government can secure capital more cheaply than private enterprise, but its economy of operation is commonly—not always—inferior. Thus it is peculiarly suited to cases in which capital charges are heavy and operating methods simple or well standardized. Government operation may also be used to control the charges of private business by competing with it. This method is obviously not adapted to regulating such things as wages and labor conditions. And it has a tendency to discourage private enterprise, which feels the handicap of competing against an organization that may operate at a deficit, even though private enterprise may be more efficient.

By and large, public control of business has justified itself. It is true that few of its branches have not witnessed serious perversions and abuses. The building code gives the corrupt inspector a chance for economic blackmail similar to that of the racketeer but more secure. The demagogue may attack the public utilities for the purpose of being bought off. Few trusts may be successfully dissolved and conservation of oil (on terms highly profitable to the conservers) may be temporarily prevented by the antitrust laws. Yet there is probably not a single major field of control in which the gains which have

been secured by this method would be willingly given up.

The frontiers of control are expanding. They are expanding geographically, increasing the importance of national functions as compared with those of local governments and compelling the beginnings of international regulation. And they are expanding in the range of things covered and the minuteness of regulation. The present relaxation of the application of the antitrust laws in the United States may be a symptom of a movement in the other direction, but is probably not to be interpreted so simply; it is a relaxation of one kind of control, while others are marching on. Whether one believes government control to be desirable or undesirable, it appears fairly obvious that the increasing interdependence of all parts of the economic system and such unsolved problems as the business cycle and unemployment will force more control in the future than has been attempted in normal times in the past.

JOHN MAURICE CLARK

See: ECONOMIC POLICY; CONTROL, SOCIAL; JUST PRICE; USURY; MERCANTILISM; CAMERALISM; LAISSEZ FAIRE; INDIVIDUALISM; COMPETITION; WAR ECONOMICS; STABILIZATION, BUSINESS; NATIONAL ECONOMIC PLANNING; LABOR LEGISLATION AND LAW; CORPORATION; COMBINATIONS, INDUSTRIAL; MONOPOLY; GOVERNMENT OWNERSHIP; SOCIALIZATION; PUBLIC UTILITIES; RAILROADS; CENTRAL BANKING; BUSINESS, GOVERNMENT SERVICES FOR; PRICE REGULATION; CONSUMER PROTECTION; POLICE POWER; DUE PROCESS OF LAW; COMMISSIONS; NATIONAL ECONOMIC COUNCILS.

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HUGO, VICTOR-MARIE (1802-85), French writer. Hugo was a fervent apostle of the ideals of modern democracy. Although he was at first a royalist, his sympathies gradually grew more liberal and during the reign of Louis-Philippe his political ideal became pragmatically "a republic in fact, and a monarchy in word." He was still a conservative republican when he was elected to the Constituent Assembly after the overthrow of Louis-Philippe in 1848, but in the following year after his election to the legislative assembly under Louis-Napoleon he became suddenly an extreme radical. After the coup d'état of 1851 he was forced into exile, which he spent successively in Brussels, Jersey and Guernsey. In 1870 after hearing of the fall of the empire he returned to Paris and in 1871 was elected to the popular assembly (Bordeaux) convened to consider whether France should continue the war with Germany. Annoyed with the opposition he resigned and went out of France, first to Brussels, and then, because of his too frank partisanship for the defeated Commune, to Luxemburg and, in 1872, back to Guernsey. In 1876 he was elected to the Senate but his significance in practical politics was ended.

Hugo's *Napoléon le petit* (1852), *Les châtements* (1853) and *Histoire d'un crime* (1877-78) were the products of his exile and his furious hatred of the empire. Less passionate although perhaps equally polemic was his earlier work, *Le Rhin* (1842), in which he embodied his conviction of the essentially Gallic nature of the left bank of the Rhine and his belief in a desirable and feasible United States of Europe. Hugo's ideal of democracy and his belief in continuous "progress" became more and more mystic and brought him finally to his testamental *Fin de Satan* (1886), in which, all social and religious questions being explained in terms of a universal system, the Principle of Evil is pardoned and the world set free.

Liberty was a catchword for Hugo, but it implied for him no distinct counterpart of responsibilities. It meant, first, opposition to censorship and revolt against the "rules" of post-classicism; then, dislike of whatever appeared as oppression by church or state; last, to a large extent hatred of any encroachment on personality. Young France hailed more and more, in

1830, 1848 and 1875, this social gospel embodied in magnificent books of verse and prose without noticing that Hugo's creed, Napoleonic in its secret aspirations, often lacked social conscience and due respect for the real needs of the times.

There is much of Rousseau in Hugo's social philosophy—his belief in instinct and the goodness of man, his adoration of children, his scorn of hierarchies and dogmas. Perhaps the most complete expression of his social ideals is *Les misérables* (1862). The people are the true depositories of divine wisdom, with instinctive views resting on a principle of goodness and justice which has been stored away in the hearts of mankind while society has forgotten its meaning. Thus "education" (which is deciphering a hidden knowledge in instinctive minds), universal suffrage (which makes distinct the *vox populi*), suppression of the death penalty and rehabilitation of the convict and the fallen woman are of equal importance with his concrete schemes concerning the development of modern cities and the welfare of masses. How is Gavroche, the small city boy, not corrupt but ignorant, to be made a responsible member of the community without the help of the family and of the catechism? This is in a way the main issue of the novel and it may be said to be the chief problem in Hugo's sociology.

FERNAND BALDENSFERGER

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HUGOLINUS. *See* FOUR DOCTORS.

HUMAN ECOLOGY. *See* ECOLOGY, HUMAN.

HUMAN GEOGRAPHY. *See* GEOGRAPHY.

HUMAN NATURE. The significance of the idea of human nature for the social sciences gathers about three questions: (1) Are contempo-

rary political and economic institutions necessary products of human nature? Or, more generally, does the very constitution of human nature show that certain social arrangements are likely to be successful while others are doomed to failure? Is war, for example, inevitable because of facts of human nature? Is self-interest so ingrained in human nature that the attempt to base industry on anything except a competitive struggle for private gain is sure to fail? (2) How far is human nature modifiable by deliberate effort? Or, in other words, which is more important, nature or nurture? Or, in still another form, how are heredity and environment related to one another? Which is more potent in the determination of behavior? (3) How great and how fixed is the range of variations in human nature between individuals and between groups? Are some racial or social groups by nature definitely inferior to others because of causes which cannot be altered? The same question is asked concerning individuals within each group.

These questions are bound up with controversies involving intense feeling. They largely condition the differences between conservatives and liberals, between aristocrats and democrats, between nationalists and internationalists. They are associated with emotions of complacency, pride and egoism. It is therefore extremely difficult to attain impartiality with respect to them, and discussions are often apologetics for some position already assumed on partisan grounds. There is, however, one incontrovertible fact about human nature—that the term has been used in a variety of senses and that in the history of thought there has been some correspondence between the interpretation of the concept and the general institutional and intellectual character of the time.

Four principal conceptions of the term may be mentioned: (1) The term is used to designate an alleged original and native constitution; that which is instinctive instead of acquired. There is a possible ambiguity here unless it is made clear whether the native constitution is taken to be common to all normal human beings or is one peculiar to particular individuals. (2) Human nature is defined in terms of alleged psychological powers or faculties, the "psychological" being placed in antithesis to both the physical and the social. Every normal human being is said to have certain powers, like perception, judgment, memory, desire. These powers are formal; they are to be distinguished from what is perceived, remembered, thought about, wanted. The ma-

terial content is held to come from sources outside of human nature, from either physical nature or social life. This assumed dualism between human nature and other nature has been so widely prevalent that it often affects discussions without being avowed: to many persons it is a direct product of "common sense." It has behind it a long intellectual history: formulated by John Locke, it was taken up by the British liberal school and became the basis of a distinction, on one side, between intrinsic "natural" law and "natural" rights (which are fixed and universal in the formal structure of human nature) and, on the other side, between artificial civil and political rights, which vary with conditions. (3) Human nature is in itself empty and formless and is therefore capable of being molded by external influences. Locke himself had declared that the mind is a piece of blank paper as far as any particular ideas and beliefs are concerned, although he had endowed it with certain formal faculties or powers. His French successors, like Condillac and particularly Helvétius, thought they were rendering him logically consistent when they held that "faculties" also were impressed on the mind by experience, mind being nothing but susceptibility to impressions from without. In this view education and the influence of the environment are all powerful. If men are corrupt and prejudiced, seeking only their private power and profit, it is only because institutions have formed them in their own likeness. (4) Human nature cannot be properly conceived or defined in terms of the constitution of individuals either native or acquired. Human nature can be known only through its great institutional products—language, religion, law and the state, the arts. As displayed in individuals it is merely potential; it develops into reality under the influence of cultural institutions, which form the content of objective mind and will. This theory drew some of its support from the teachings of Aristotle, especially in applying the distinction of "potential" and "actual" to human nature. But it was formulated especially by the school of institutional idealists headed by Hegel. Aside from any metaphysical formulation it influenced for a generation or more German students of comparative language, religion and law and was a great factor in producing the conception of a social mind which was made the basis of an entire school of social psychology.

It is obviously hopeless to look for agreement as to the modifiability of human nature or its relation to society, where the very content of the

term is so variously conceived. The last named conception, for example, expressly denies that the facts of original, or native, structure and instinct which the first conception treats as constituting human nature are anything more than crude and undeveloped potentialities, so inchoate in themselves that we could not even give them names were it not for knowledge of what they are capable of becoming, a knowledge which is had only by noting the institutional forms of a mature culture. We have here an instance of the controversy as old as Aristotle as to whether "nature" is to be defined in terms of origin or of complete development, i.e. of "ends." At first sight it might seem as if the difference could be explained away as merely one in verbal definition, one school using the word for one set of facts and the other school for another. If this were all there might be disagreement about the application of a word and yet agreement about the things to which different names are applied. Such, however, is not the case. The supposition that there is such a thing as a purely native original constitution of man which can be distinguished from everything acquired and learned cannot be justified by appeal to the facts. It is a view which holds good only when a static cross section is taken; when, that is to say, growth is ignored. The theory takes, as it were, a snapshot of man at, for example, birth, ignoring past history in the uterus and future history when the supposedly fixed and ready made structures will change as they interact with surroundings. Biologically all growth is modification and all organs have to be treated and understood as developments out of something else and as pointing forward to still something else. The conception of a fixed and enumerable equipment of tendencies which constitutes human nature thus represents at the best but a convenient intellectual device, a bench mark useful for studying some particular period of development. Taking a long enough time span, it is fruitless to try to distinguish between the native and the acquired, the original and the derived. The acquired may moreover become so deeply ingrained as to be for all intents and purposes native, a fact recognized in the common saying that "habit is second nature." And, on the other hand, taking a long biological evolution into account, that which is now given and original is the outcome of long processes of past growth.

Practically, however, with reference to the possibility of control the distinction between the native and the acquired is important. Barring

some future possible development of eugenics, our practical control of growth begins at birth; in controlling future developments we must start with what exists at that time. Existing organs, impulses, instinctive tendencies, form the resources and the capital on which future development must build. Included in this native stock is, however, the tendency to learn and to acquire. That the tendency to learn and hence to modify and be modified is itself part of the native (and hereditary) structure may appear too much of a truism to need statement. Nevertheless, this must be borne in mind, since it is decisive in showing how impossible it is to make any hard and fast distinction between the natural and the acquired, the native and cultural. The capacity for modification is part of the natural make up of every human tendency; it belongs to an unlearned equipment (as that is defined at a particular time) for learning, in which process it is itself changed. Recognition of this fact will save us from devoting energy to unreal questions and lead to concentration upon the important ones: What are the limits to modification through learning? How does the modification concretely proceed? How is it controllable?

On this question—in fact, on all issues concerned with human nature—men have entertained historically a variety of views. Classic Greek thought is based upon belief in the natural and inherent inequality of men. The most widely known expression of this point of view is Aristotle's statement that some men are slaves "by nature" and hence are to be ranked with tools and domestic cattle as means of production. The entire class of mechanics even if legally freemen belongs in this category, being by nature shut out from the truly free or liberal life, that of the mind. Retail shopkeepers are means also of serving material purposes and do not belong to the realm of ends. While this view was to some extent a rationalization of social prejudices which had been incorporated into the Athenian system it was also something more—a systematically thought out interpretation of human nature. In this interpretation the reason given for holding that some men are slaves by nature—even more important than the view itself—was that they possess an inherent deficiency in rational insight. Reason is the governing power in man; it is a condition of self-government and participation in civic government. Impulses and passions must be kept in subjection to rational aims unless there is to be social and moral chaos. Hence it is intrinsically proper that some persons should be

the animate instruments of others. The mass of non-Athenians who were not citizens and also not slaves but classed as mechanics (i.e. tools) by nature were said to occupy a lower status morally than slaves, since the latter, living in a certain intimacy of communication with their masters in the household, attained a kind of reflected rationality. Women were also ranked as constitutionally inferior and hence as properly subject to fathers and husbands; so also were the barbarians as compared with the Greeks, although the northern races, in whom spirited impulses are strong, were ranked higher than Asiatics, in whom appetites for ease, possession and passive enjoyment were dominant.

After the decay of Athenian culture at the time when the stoics were the ruling school of thought it was assumed as axiomatic that men are equal by nature and that differences among them are differences of status due to convention, to political organization and to economic relations, which are instituted rather than natural. So complete a revolution in thought in a few centuries is difficult to account for, but among the influences may be discerned the fact that the cynic precursors of the stoics were drawn largely from a proletariat class having no citizenship. The decay of the city-state with its intimate organization of loyalties, the growth of the impersonal Roman Empire, the weakening of local ties and the development of cosmopolitan sentiment were among the objective forces at work.

The doctrine in its original form did not have radical implications regarding existing institutions. The conception that political and economic inequality was based not on nature but on institution carried with it no attack on the latter. The stoic idea was favorable to the spread of a moral sentiment of confraternity among individuals as individuals, but in general it called for loyal acceptance of one's status in the existing social order. When the Christian church proclaimed the same doctrine of natural equality, it was also interpreted in a religious and moral sense free from political implications. Doctrines, however, outlive their original context, and at later times the stoic and Christian idea of natural equality was given a revolutionary interpretation.

The blend of Greek thought and oriental culture known as Hellenistic and centering at Alexandria took another turn, adverse to attaching value to nature in any form, physical or human. Because of what Gilbert Murray has termed "failure of nerve" the age centered its intellectual and emotional interest on the super-

natural and on the special means by which favorable relations with it were to be established. Little value was attached to social institutions of any kind in comparison with the method by which redemption of the soul was to be effected. The depreciatory view of nature which was instilled became associated with religion in the degree in which the latter lost the definite civic form it had in classic antiquity.

The main direction of thought in the mediaeval period represents a synthesis of ideas derived from different sources. There was the idea of the natural equality of men, an idea especially cherished during the earlier period in which the membership of the Christian churches was composed mainly of the disinherited. Morally speaking, a strongly democratic sentiment was inculcated. There was also, however, the tradition of the insignificant value of the natural in comparison with the spiritual interests represented by a superworldly kingdom. In fact, because of the corruption of nature due to the fall of man complete subjection of the natural man to the discipline and sacraments of the church was required, since the church was the divinely instituted and supported guardian of spiritual truth. The ascetic influences which prevailed in monastic circles accentuated the depreciatory view taken of the natural. At the same time, as the church became established as the supreme European institution and its doctrine took shape in scholastic philosophy, its official theory grew far from hostile to the conception of nature. On the contrary, under the influence of revived Aristotelianism it gave nature a place and validity of its own within definite limits; namely, as subordinate to revelation wherever the latter had spoken authoritatively. Moreover, as the struggle for authority between church and empire became acute, the doctrine of the conventional and instituted or positive character of political authority took a form distinctly hostile to the claims of the latter, so that the teachings of the church theorists helped to furnish later revolutionaries with weapons of attack upon the authority of autocratic governments.

It is a commonplace that what is called the modern period was marked by a new interest in and by a new respect for nature. This extended to human nature. There were explicit attempts to free moral and political theory from ecclesiastic and indeed from all institutional influence. The positive side of this movement found the authority needed for the new morals and politics in human nature. But a cleavage showed itself

almost at once with respect to the constitution of human nature in a controversy as to what element is dominant "naturally" and must therefore according to the theory be considered the support of political theory and practise. One school foreshadowed by Grotius and developed by his continental successors in the natural law tradition emphasized "reason" as the important factor. This, however, had little but the name in common with the classic Greek conception, although somewhat more kinship with the stoic conception. Reason was the universal element; the universal was the common, and the common was the bond of union among all men. It was the social tie which holds all human beings together in society even apart from and prior to the formation of a political state. Its social nature is expressed in the natural, or moral, laws which underlie political organization, and to which the latter must conform if it is to be just. A series of jurists and philosophers deduced the state with its basic laws and its systems of civil rights from this element in human nature.

English thought took a different turn in the seventeenth century, in which it was followed upon the whole by influential French thought in the eighteenth century. Continental thought was meant to justify law and authority by showing their accord with rationality as the reigning element in human nature. English thought was concerned to protect individuals from the encroachments of governmental action and, when necessary, to justify revolt. Psychologically it started from desire and emotion instead of reason and ended in a theory of rights instead of obligations. The writings of Thomas Hobbes, the real founder of British theory, are important in this connection even though outwardly he employed his doctrine to substantiate the claims of a powerful centralized state. In so doing he was actuated by hostility to the claims of churchmen—Presbyterians, Independents, Church of England adherents as well as Catholics—and he appealed directly to the affective side of human nature as primary. Moved by the civil wars and disintegration of his time, he appealed especially to fear and the need of security. English political thought after Hobbes consistently interpreted human nature in terms of the primacy of non-rational factors, pointing out that these employed reason as a means of obtaining satisfaction for themselves.

With the rise of the new industry and commerce, however, an important variation was introduced. The economists who set out to give

intellectual expression to the rising industrialism started from the affective side of human nature in accordance with prevailing English doctrine. They developed, however, a much more systematic theory than had ever been developed of the nature and operation of wants, out of which came a new conception of natural law. Economic activity, on this view, is basic; from it are derived the natural, in the sense of non-artificial, laws of human conduct. Society is the product of the efforts of human beings to satisfy their wants, since division of labor, exchange and permanent property are involved in this satisfaction. Government and political action exist in a secondary way in order to give security to the free play of economic forces. In its early stage the theory was thoroughly optimistic in its anticipations of the future of society when freed from the artificial regulations of political action. The conception of natural harmony was implicit or explicit. The land and rent theory of Ricardo and the population theory of Malthus introduced factors of inevitable disharmony and conflict which later gave a pessimistic turn to the view entertained of the workings of human nature.

It would thus appear that during the greater part of the history of European thought conceptions of human nature have been framed not with scientific objectiveness but on the basis of what was needed to give intellectual formulation and support to practical social movements. There is a reason for this beyond the ordinary tendency to use ideas to further practical activities. A new social movement brings into play factors in human nature which were hitherto dormant or concealed; in thus evoking them into action it also presents them to the notice of organized thought. A striking example of this fact is the reversal by most recent theory of the place attributed to wants in classic Greek speculation. In Greek thought wants were a sign of defect; they were to be kept under strict control inasmuch as they were the chief causes of social and moral disorder. Since the industrial revolution theory has generally held that wants are the motors of social progress, the dynamic force in creation of initiative, invention, the production of wealth and new forms of satisfaction.

The factors which have of late operated to put the question of the constitution of human nature on a more objective basis are the rise of a psychology with biological foundations and the development of anthropology. The psychological factor has made it clear that if definitive results are to be reached regarding the native or original

equipment of man they must be sought from physiological study correlated with structural studies of human behavior at various stages of growth, especially intra-uterine and immediately postnatal. The native equipment is, roughly speaking, identical with the biological equipment; recognition of this fact will in time take the theories of the matter out of the area of speculation into that of observable fact. Anthropology, on the other hand, has made it clear that the varieties of cultural and institutional forms which have existed are not to be traced to anything which can be called original unmodified human nature but are the products of interaction with the social environment; they are functions, in the mathematical sense, of institutional organization and cultural traditions as these operate to shape raw biological material into definitively human shape. If we except the extreme partisan stand, it may be regarded as now generally accepted that the immense diversities of culture which have existed and which still exist cannot possibly be derived directly from any stock of original powers and impulses; that the problem is one of explaining in its own terms the diversification of the culture milieus which act upon original human nature. As this fact gains recognition, the problem of modifiability is being placed upon the same level as the persistence of custom or tradition; it is wholly a matter of empirical determination, not of a priori theorizing. It cannot be doubted that there are some limits to modifiability of human nature and to institutional change, but these limits have to be arrived at by experimental observation. At present there are no adequate experimental data on which pronouncements may be based. Moreover when such limits are found it will be important to discover whether they are intrinsic and absolute or whether they are to some extent due to limitations of our technique for effecting change. Certainly some of the limits existing at any particular time will recede, exactly as have the earlier limits in control of the energies of physical nature, with increased knowledge of causal factors. At the present time, for example, we can predict to some extent on a statistical basis the effects of educational measures. But the effect of education upon the development of a particular individual is, as far as foresight is concerned, still largely a matter of guesswork. It would be hard to find a fact by which to illustrate more forcibly the limitations of our present technique in effecting modification of human nature. Although schools abound, education as a controlled process of

modification of disposition is hardly even in its infancy.

The present controversies between those who assert the essential fixity of human nature and those who believe in a great measure of modifiability center chiefly around the future of war and the future of a competitive economic system motivated by private profit. It is justifiable to say without dogmatism that both anthropology and history give support to those who wish to change these institutions. It is demonstrable that many of the obstacles to change which have been attributed to human nature are in fact due to the inertia of institutions and to the voluntary desire of powerful classes to maintain the existing status. With regard to the possibility of economic reconstruction history demonstrates the comparative youth of the present regime; and revolutionary societies may be regarded as social laboratories in which is being tested the possibility of securing economic advance by means of other incentives than those which operate in capitalistic countries. For the immediate present all that can reasonably be hoped for with reference to the general issue of human nature are: a willingness to substitute special concrete plans of modification for wholesale claims and denials; the growth of a scientific attitude which will weaken the force of ideas and battle cries coming from the past; willingness to see social experiments tried without interference by outside force; and the use of educational means that are regulated by intelligent foresight and planning instead of by routine and tradition.

JOHN DEWEY

See: MAN; INSTINCT; HABIT; CONTINUITY, SOCIAL; CHANGE, SOCIAL; CONTROL, SOCIAL; INSTITUTION; RACE; CULTURE; ENVIRONMENTALISM; HEREDITY; ECONOMIC INCENTIVES; ALTRUISM AND EGOISM; EQUALITY; SOCIAL REFORM.

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is not enough to legislate; the villages must be galvanized into self-help. One party in India and one alone might in its erratic way do this, and that party is the Congress. But it seems that England can bestow freedom on India only by crushing the Congress.

H. N. BRAILSFORD

See: EMPIRE; IMPERIALISM; CHARTERED COMPANIES; RACE CONFLICT; CASTE; BUDDHISM; BRAHMANISM AND HINDUISM; ISLAM; PAN-ISLAMISM; CALIPHATE; EUROPEANIZATION; NATIONALISM; DOMINION STATUS; COLONIAL ECONOMIC POLICY; OBEDIENCE, POLITICAL; PASSIVE RESISTANCE; NON-COOPERATION; BOYCOTT; MASSES; MASSACRES; AGRICULTURE, section on INDIA; VILLAGE COMMUNITY.

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INDICTMENT. See GRAND JURY; PROSECUTION.

INDIVIDUAL DIFFERENCES. See PERSONALITY; MENTAL TESTS.

INDIVIDUALISM is a modern word. The Oxford Dictionary finds the first instance of its use in Henry Reeve's translation of de Tocqueville's *De la démocratie en Amérique*, in 1840. Reeve in a note apologizes for adopting the term directly from the French because he knows "no English word exactly equivalent to the expression." De Tocqueville explains the meaning of the term thus: "*Individualism* is a novel expression, to which a novel idea has given birth. Our fathers were only acquainted with egotism. Egotism is a passionate and exaggerated love of self, which leads a man to connect everything with his own person and to prefer himself to everything in the world. Individualism is a mature and calm feeling, which disposes each member of the community to sever himself from the mass of his fellow-creatures; and to draw apart with his family and friends: so that, after he has thus formed a little circle of his own, he willingly leaves society at large to itself . . . individualism is of democratic origin, and it threatens to spread in the same ratio as the equality of conditions" (vol. iii, bk. ii, ch. ii).

The primary meaning of the word then is of a state or attitude of mind which is naturally produced in a certain kind of society. That society is most easily described in negative terms. It is one in which little respect is paid to tradition or authority. It is as far removed as possible from that primitive type of social organization where the overpowering dominance of tribal custom and tradition leaves little scope for individual initiative and concern and the members of the

tribe are so absorbed in the group that it forms what anthropologists have called a tribal self. More positively, an individualistic society is one where people "think for themselves" and are regarded as being "the best judges of their own interests," it being assumed that they have interests and business which are only their own. It is a society where "the movement from *status* to *contract*," which Maine regarded as the mark of a progressive society, has gone a long way.

Although such an attitude of mind may be characteristic of modern democratic societies it has existed before and is not so novel as de Tocqueville seems to imply. When Thucydides makes Pericles in the Funeral Oration say of Athens, "In our private intercourse we are not suspicious of one another nor angry with our neighbor if he does what he likes," he is describing the beginnings of individualism in this first sense of the word. The fifth century in Greece was marked by a great disintegration of tradition brought about, like individualism in modern times, partly by scientific discovery. As the Peloponnesian War increased this disintegration, Greek society was pervaded by an individualism so thoroughgoing that it is hardly distinguishable from egoism. This frame of mind is revealed at its best in the ideal of self-sufficiency which is an element in the Socratic character and which was taken up after Socrates and made into a way of life by the cynics. It shows itself in a less favorable light in some of the sophists of the end of the fifth century.

In the highly self-conscious society of that period attitudes were quickly expressed in theories, and Greece at this time offers the beginnings of individualism in a second and modern sense—a theory of the proper relation of the individual to the state. The Greek theories were concerned not with economic organization but with the more general question of political obligation. With this qualification, however, they were prototypes of modern individualist theories with respect to the relation of the individual to collective organization and his freedom from state interference. The text of the Greek theories was the contrast between nature (*physis*) and law or convention (*nomos*). Greek individualism foreshadowed modern individualism in that this contrast took two forms. The commoner form of the contrast in both periods is based on a belief in men's natural egoism. The social contract theory—the characteristic political theory of individualism—as put by Plato in the *Republic* into the mouth of Glaucon is in fundamentals

the same as the theory of Hobbes. Men by nature want to do injustice and not to suffer it. Finding the results of this state of affairs disagreeable, they make a convention neither to do nor to suffer injustice. Law is therefore an instrument for the benefit of selfish self-centered individuals. When it is not such it may be disregarded. So Callicles in the *Gorgias* contrasts the conventional justice of the law with natural justice, the right of the stronger. So also in the fragment of the sophist Antiphon legal justice is something added, a conventional rule which goes against nature. Such individualism is barely distinguishable from a theory of egoism. But in the second form of the contrast there are signs of another individualism which looks on law as cramping not the natural badness but the natural goodness of men. Thus Hippias the sophist is made to say in Plato's *Protagoras*: "All of you who are here present I reckon to be kinsmen and friends and fellow citizens, by nature and not by law: for by nature like is akin to like, whereas law is the tyrant of mankind and often compels us to do many things which are against nature." Some sophists attacked slavery as an unnatural institution.

There are also in Greek thought the beginnings of individualism in a third sense. In the *Laws* Plato connects with materialism those views which disparage law and the state, as he elsewhere connects them with sensationalism. Individualism, from a theory of what ought to be the relation between the individual and the state, becomes a metaphysic, the doctrine that the individual is a self-determined whole and that any large whole is merely an aggregate of individuals, who if they act upon each other at all do so only externally. It was no accident then that the most thoroughgoing moral individualism of the ancient world, the philosophy of Epicurus, based itself upon the atomism of Democritus. Epicurus was an individualist in his account of the relation of the individual to society. "There is no such thing as human society. Every man is concerned for himself." "Justice never is anything in itself, but in the dealings of men with one another in any place whatever and at any time, it is a kind of compact not to harm or be harmed." "We must release ourselves from the prison of affairs and politics." This moral doctrine was connected with a metaphysic which held that all things were made up of atoms—the Greek for individuals; that the variety of the world was accounted for by the composition and ordering of identical units. It

was bound up also with a psychological atomism which made the isolated sensation its unit and association and the desire for pleasure and aversion from pain its key to the explanation of mental phenomena. Further it is to be noted that Epicureanism was not naked egoism, although if it had been true to its materialistic basis it perhaps ought to have been. "Of all the things," says Epicurus, "which wisdom acquires to produce the blessedness of the complete life, far the greatest is the possession of friendship." Epicureanism, like much later individualism, starts with an intense appreciation of the voluntary and free relation of friendship in contrast with the compulsory and traditional bond of political and legal association; in order to justify this it emphasizes the free relation of contract and develops as a consequence of this one-sided emphasis on the freedom of friendship a psychology and a metaphysic which are really incompatible with the valuation with which it started. Thus in Epicureanism are found many of the elements which make up modern individualism: the view that society is nothing more than an aggregate of individuals; the doctrine that the state, law and justice are at best necessary evils; a scientific attitude of mind which leads to the acceptance of psychological atomism and hedonism; and a high valuation set on the voluntary association and the relation of contract.

To produce modern individualism two things especially were required: the enhancement of the idea of the supreme worth of the individual, which came from Christianity and blazed up again at the Reformation; and, secondly, the emergence of an economic system dominated by exchange. These two elements did not make modern individualism a more consistent doctrine. On the contrary. But they made it a more far reaching and pervasive doctrine. Religious individualism did not originate in Christianity, but it is not characteristic of earlier Judaism. The latter makes Israel—the nation, and not individuals—the concern of God. But with the downfall of national hopes there emerges in the prophets a new conception of the dealings of God directly with the individual. This finds most vivid expression in *Ezekiel* (xviii: 2-4): "What mean ye, that ye use this proverb concerning the land of Israel, saying, The fathers have eaten sour grapes, and the children's teeth are set on edge? As I live, saith the Lord God, ye shall not have occasion any more to use this proverb in Israel. Behold, all souls are mine; as

the soul of the father, so also the soul of the son is mine: the soul that sinneth, it shall die." Jesus in the Gospels takes for granted the direct relation of the individual with God. This is implied in the teaching of the fatherhood of God, and in such sayings as "Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me" (*Matthew* xxv: 40). This religious individualism is quite unlike Epicureanism or even stoicism, for it combines a belief in the supreme worth of the individual with the teaching, "He that findeth his life shall lose it: and he that loseth his life for my sake shall find it" (*Matthew* x: 39). The individual who is of supreme-worth is not isolated, but realizes himself in the service of the brethren. Individualism and socialism as ordinarily understood emphasize one or other of the two aspects which in Christian teaching are inseparable, and it would therefore be misleading to say that the teaching of the New Testament is solely religious individualism. But there is in the New Testament and in all Christianity the teaching of the supreme value of the individual, which is the great contribution to individualism. The end of institutions and social organization is to be found in their effect on the eternal destiny of the individuals. There is connected with this a doctrine of human equality, the basis of which is that compared with the infinite worth of human personality other differences, real and important as they may be, are irrelevant: "... neither Greek nor Jew, circumcision nor uncircumcision, Barbarian, Scythian, bond nor free . . ." (*Colossians* iii: 11).

The emphasis upon the individualist and the collectivist elements, which are both present in Christianity, has varied from time to time. The Reformation was an emphatic assertion of the individualist element which had been overshadowed by the authority of tradition and of the organization. The central doctrine of the Reformation was the universal priesthood of believers, a doctrine in implication individualistic and democratic. Luther himself did not draw the full consequences of his teaching of the "Liberty of a Christian Man," but those who followed him did—notably the Anabaptists, the Independents and the Quakers. Their religious individualism turned away from everything in organized Christianity which stood for the corporate and authoritative aspect of the church. Its implication was almost that "organized Christianity" is a contradiction in terms. The church is a fellowship of believers, each the-

direct concern of God, each directly responsible to God, each guided by the illumination of God in his own heart and conscience. Hence there follow the doctrine of the inner light; the doctrine of religious equality, which makes the church the self-governing democratic congregation; the doctrine of the separation of religion and politics; and the denial that the law can make people good. Compulsory religion and compulsory morality both become contradictions in terms. Such religious individualism is a long way from Epicureanism, because it is not self-centered but God-centered. But when the religious faith which inspired it declines, its individualist principles tend to harden into egoistic individualism, although they often retain some element which only religious faith made possible. Utilitarianism, for example, retained a belief in human equality and a zeal for the welfare of others which from the point of view of the hedonistic psychology it had worked out were ridiculous.

This thoroughgoing religious individualism, most obviously exemplified in the Quakers, was held by only a small number; but its pervasive influence over all Protestant Europe and America was very great. Its denial of religious authority made necessary a new basis for political obligation in the principle that it is the concern of the state not to enforce a common standard of right action but to maintain a system of rights which are protected liberties. Because of its insistence on the absoluteness of conscience, the problem of modern political theory became the problem of how to reconcile the rights of conscience with political obligation. Hegel can scarcely be called an individualist, but he finds a place in the state for the individualistic element under the name of morality or the sphere of subjective individuality. He makes liberty the end of the state, and he makes the superiority of the modern over the ancient state to consist just in its finding room for this element. All modern political theory, except the theory of Bolshevism and of Fascism, is in this sense individualistic in that it seeks to find room for and encourage the individual moral judgment and is based on toleration and the maintenance of a system of rights. Most of the differences between modern individualism, strictly so-called, and socialism are differences within these common assumptions.

A second formative influence of modern individualism which must be considered before economic individualism is discussed is the effect of modern physical science upon social studies. The

rise of the modern sciences began with a repudiation of final causes, a return to atomism and a new emphasis on methods of quantitative measurement. The great prestige of the new physical sciences produced continuous attempts to apply their method to the study of man in his social relations. Such a scientific study of society will tend to treat individuals as independent units. Each will be regarded as an atom, something having its own nature complete in itself. If they are to be scientific units they will have to be atoms identical in qualitative character. Because the theory will be interested mainly in the laws of the combination of such units it will tend to regard the units as equal. Human equality is in one sense not a scientific doctrine. For scientific observation of men is bound to reveal their differences, and the supreme worth of human personality is not a scientific fact. But human equality may and did become the prejudice of a scientific method which is trying to apply the principles of the quantitative sciences to human affairs. The assumptions of scientific method thus confirmed a doctrine whose real origin was in religious and not in scientific individualism.

Hobbes was the first systematically to attempt to make political theory scientific in this new sense. His men are for the purposes of his theory identical, equal units. Because they are identical, their relations with one another are purely external. Their natures are not affected by the social relations into which they enter. This is the characteristic doctrine of what may be called scientific individualism. It persists in Locke, is abandoned by Rousseau and revived again by Bentham. Social and political relations are merely means by which the individual obtains more efficiently what he desired before he entered into those relations. The means may seem incompatible in temper with the ends for which they are advocated. Hobbes' men just because they know no natural restraint in their own nature have for the meager satisfaction of their selfish natures to accept a despotic authority in the state. Complete liberty thus has a way of turning into complete absolutism. But political and social relations do not bite into the natures of individuals. The individuals remain the same unchanged, spiritually isolated atoms.

The remarkable thing about this scientific individualism is that it failed as a theory of politics but had a noteworthy success in practical legislation and in economics. Modern political theory took its fruitful start not from Hobbes but from Rousseau, who was in spirit an individualist but

taught that men's moral purposes developed only in and with society. He thus revived the tenet of religious individualism that the individual finds himself only in as far as he devotes himself to something outside himself. The same principle is implied in Kant's distinction of the phenomenal self of mere inclinations and the real self which is found in the self-imposition of universal law. It was developed by Hegel and is fundamental both in T. H. Green's account of the nature of rights and in Bosanquet's doctrine of the general will.

In the main, however, English and French theory followed Hobbes' methods although it did not accept all his conclusions. The aim of the English empiricists was to found a science of human nature on the analogy of the physical sciences and therefore to apply the principle of atomism not only to society but to psychology and ethics. While for the purpose of society the individual is treated as a unit, for the purpose of psychology he is in turn regarded as a collection of psychological units—sensations or desires for pleasure and aversion from pain. Scientific individualism, like Epicureanism, bases itself on psychological atomism. The decisive steps in this analysis were taken by Hume, but Hume was not entirely a rationalist; he tempered his rationalism with a naturalism which found a place for sympathy along with egoism. Adam Smith followed Hume in this ambiguous attitude. He uses the hypothesis of universal egoism to explain the mechanism of exchange and the hypothesis of sympathy in order to explain the origin of governments. He exhibits therefore the double view of the harmony of interests which runs through Benthamism. He assumes in economics a spontaneous harmony of interests. "The study of [a man's] own advantage naturally or rather necessarily leads him to prefer that employment which is most advantageous to society." But politics is necessary because in other spheres interests are not naturally harmonious and need to be harmonized by the action of the law.

Hume's philosophy of association was sharpened in France in the hands of Helvétius into a strictly rationalistic and scientific doctrine and from him taken over by Bentham, the great exponent of scientific or, as it is sometimes called, radical individualism. Bentham was conscious that his task was to set up the study of society on a scientific basis and that therefore no facts were to be admitted which were not capable of clear definition and quantitative treatment. He imagined that psychological atomism and he-

donism would alone give him an account of human nature to which strict scientific analysis could be applied. Hence his elaborate defense of that conception of human nature which is implied in the economic man. But Bentham was not simply the calm investigator anxious to discover the scientific facts. Scientific analysis in the natural sciences had been the necessary means of man's mastery over nature. Bentham wanted a clear theory of human nature in order that as a law reformer he might know how to act upon it. He sees men as separate individuals seeking only pleasure and relief from pain. The pleasures and the pains they seek, like those who seek them, are qualitatively identical. Bentham asserted concerning individuals that each was to count as one and no one as more than one; concerning pleasures, that pushpin was as good as poetry. But although qualitatively identical, pleasures and pains can be quantitatively analyzed, compared and summed. The legislator observes in this aggregate of individuals seeking aggregates of pleasures diversities of interests, and his aim in legislating and in distributing punishments and rewards is to correct the disharmonies and by promoting an artificial identification of interests to produce the greatest happiness of the greatest number. The legislator himself is of course curiously different from those for whom he legislates. They seek their own pleasure; he seeks theirs. How in accordance with a general theory of psychological hedonism he manages to do that is, incidentally, hard to discover. Bentham and the Benthamites—James Mill, Joseph Hume, Francis Place and the rest—had an inborn zeal for reform. The theory gave them a clear simple view of human nature. With it they had a standard to guide them in reforming the cumbrous and antiquated contemporary system of law and government. It certainly needed simplification, and simplification was the starting point and goal of their theory. The psychology and the moral theory of utilitarianism, as this system was eventually called, have often been criticized. Psychological hedonism is an indefensible doctrine, and if it were true, utilitarianism would be untrue. For there is no passage from the fact that all men seek their own pleasure to the demand that they should seek the pleasure of the greatest number. But in spite of its defects this scientific individualism had far reaching consequences for English law and government, and for obvious reasons. From the point of view of the effect of legislation it does not matter whether the legislator thinks

that men seek pleasure or try to do their duty. If he makes it the aim of law to make men free to seek their own happiness as far as is compatible with others doing the same he will in effect be making men free to seek pleasure or to try to do their duty. Scientific individualism provided a simple and comprehensive theory by which a law which still tried to make people do what was right was transformed into a law which maintained a system of equal rights and sought to give all men the liberty essential to lead the good life. "Bentham," says Dicey, "was primarily neither a utilitarian moralist nor a philanthropist: he was a legal philosopher and a reformer of the law"; and his success in Dicey's view was based on the principles that "legislation is a science," that "the proper end of every law is the promotion of the greatest happiness of the greatest number" and that "every person is in the main and as a general rule the best judge of his own happiness."

The success of this legislation was not due to its scientific character to quite the extent that its adherents supposed. It professed to act on the general principle that men should be allowed to do as they like provided that they do not interfere with the liberty of others to do the same. But the law cannot really be so indifferent to what people like. A noise may be a nuisance although other people remain at liberty to make more noise: for what is wanted by the majority may not be liberty to make a noise, but quiet. Scientific individualism will not furnish a complete theory of legislation. Law has also to rest on the fact that there are certain kinds of behavior which most people in a community at any given time want to encourage or discourage. That implies some conception of a common good or the good life. The Benthamites failed to notice this, because they were typically middle class people promoting the legislation which the rising middle class wanted. They imagined that their principles were much more universalist than they were. It should also be noted that while scientific individualism did much good in legislation in extending the sphere of contract, its tendency to treat all human relations in terms of contract was an element of weakness. Not only did it produce an inadequate account of the state; it broke down also when applied to such voluntary associations as trade unions.

In legislation the radical individualists worked on the principle of the artificial identification of interests; in economics they assumed the natural identification of interests. The classical econo-

mists of the early nineteenth century accepted the utilitarian analysis of human nature and supposed that if the processes of free exchange were allowed to operate unchecked the greatest happiness of the greatest number would be automatically produced. This is less absurd in the economic sphere than it would be elsewhere. For economics is concerned with exchange, and exchange assumes that the exchanging parties have managed to identify their interests. The optimism of the earlier economists rests on the belief that, other things being equal, the division of labor and free exchange lead to an increase in happiness. The assumption is warranted although the optimism based on it is not, other things being so unequal. Nevertheless, scientific individualism seems to work better in economics than elsewhere. It is still largely the basis of orthodox economic theory. The reasons for this are to be found in the nature of the relation of exchange. Exchange is a relation in which A serves B's purposes and B serves A's purposes; neither party need be concerned for the purposes of the other although he serves them. Hence economics in its present form may be regarded as concerned with the efficient realization of purposes, the nature of the purposes being ignored. If it is regarded as the business of law in maintaining a system of rights to consider such restraints on liberty of purpose as are dictated by the good of the community as a whole, and to recognize the concern of individuals to act as their conscience dictates, then economics may be regarded in abstraction from ethics and politics, concerned as it is only with the efficiency with which purposes, if allowed by the state and approved by conscience, are achieved. This abstraction can most profitably be made so long as it is recognized that it is an abstraction. When it was made into a philosophy of social progress, as it was by the laissez faire school, disastrous results ensued and it was largely abandoned. For economic individualism as a general social philosophy assumes that individuals are equally free to make or accept a bargain, i.e. that the exchange is really free in the sense of "free and equal." But this is often obviously not the case. It presupposes an absolute instead of a relative separation between means and ends, as though the means chosen to achieve ends were not continually changing the ends. It ignores the amount of government and organization which is not contractual and which is involved in modern industry.

Economic individualism because it assumed

the natural and not, like political individualism, the artificial identification of interests failed in face of the conditions produced by the industrial revolution. Its one-sidedness easily turned the theory into its opposite. The theory meant to encourage freedom produced economic determinism. The labor theory of value, a theory originally meant to justify the distribution of property resulting from an individualistic economic system, became the central doctrine of Marxian socialism. The last great utilitarian, John Stuart Mill, largely abandoned scientific individualism whether in politics or economics. His *On Liberty* (1859) is a magnificent defense of the principle of religious individualism, of the supreme worth of individuality, although the political individualism in it, his attempt to find a principle determining clearly the limits of state interference, breaks down.

Individualism thought of as a thoroughgoing and consistent philosophy of social life necessarily breaks down. No one can really be an absolute individualist, any more than anyone can be an absolute socialist. For the individual and society interact on one another and depend on one another. Even religious individualists, who put the worth and value of human personality above all institutions, must recognize the part played by society and institutions in developing and fostering individuality. The history of ideas shows that individualism is infinitely fruitful so long as individuality is regarded as something to be achieved and realized. But if individuality is thought of, as it has been in many "individualist" theories, as something given and to be defended against attack, individualism loses its evocative force and becomes indistinguishable from egoism.

A. D. LINDSAY

See: LIBERALISM; HEDONISM; UTILITARIANISM; ANARCHISM; NATURAL RIGHTS; LIBERTY; EQUALITY; DEMOCRACY; ECONOMICS, section on CLASSICAL SCHOOL; COMPETITION; LAISSEZ FAIRE; ROMANTICISM; FRONTIER; COLLECTIVISM; SOCIALISM.

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INDUSTRIAL ACCIDENTS. *See* ACCIDENTS, INDUSTRIAL.

INDUSTRIAL ALCOHOL is ethyl, or grain, alcohol rendered unfit for beverage purposes and made available tax free for manufacturing and commercial uses. Ethyl alcohol is second only to water in importance as a solvent and no substitute has been found for it in important chemical processes. Other alcohols, however, are also used industrially. Methyl alcohol, or methanol, or-

of a strong left wing group in the Socialist party; the struggle between revolutionary and opportunist was waged over the issue of industrial unionism. During the war the new left wing, which led directly to organization of the Communist party, was influenced, although in minor degree, by I. W. W.'s, while the Communist party now claims the revolutionary heritage of the I. W. W.

PAUL F. BRISSENDEN

See: LABOR MOVEMENT; DUAL UNIONISM; SYNDICALISM; CRIMINAL SYNDICALISM; DIRECT ACTION; VIOLENCE; SABOTAGE.

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INDUSTRIALISM. Every age and every people has a character stamped upon it by the way it gets its bread. This is true not only of the modern era, which has been called the age of industrialism, but of all eras from the beginning of man's time on earth. It is as true of prehistoric peoples or of the ancient world as of modern Britain or the United States. Modern industrialism did not create man's dependence on his means of living or first cause society to take a shape governed by the nature of his economic

activities. It only sets a new shape in place of the old and causes societies to organize themselves in different ways.

Industrialism represents essentially a particular stage in human knowledge and in man's command over nature—a stage at which man has learned the arts of machine production and the use of mechanical power on a large scale but has not yet become so much the master of these new arts as to bring them to full maturity or under fully satisfactory control. It is a phase in material progress, but only a phase, destined to be superseded when its development has become sufficiently complete.

The point has not yet been reached when the world will have so thoroughly solved the problem of producing material wealth that it will cease to be a problem at all and men will be left free to turn their attention to the satisfaction of other needs and desires. Nor can one expect such a point to be reached over the world as a whole for a long time. Indeed in many countries poverty due to the underdevelopment of productive power is still by far the most pressing economic problem. The masses in China and India are still desperately poor, not from unemployment or misdirection of productive energy but from sheer inability to produce enough to provide a reasonable standard of living. Their great problem is still to increase production in order to raise their own power to consume.

But in the great industrial countries of Europe and America the situation is rather different. Not that enough is being produced to give all the citizens even of these countries a satisfactory standard of life—but in their case the further increase of actual production seems to be held back far less by a failure of productive power than by an inability to find means of distributing the increased real wealth which they are in a position to produce. Their problems are primarily unemployment, unremunerative prices, lack of proper balance between the output of different kinds of goods, dislocation of regular trading relationships between countries and a creaking of the financial mechanism by which the exchange of goods has to be carried on. They could produce far more with their existing resources than they are producing at present; but they cannot do this because there is something seriously wrong with their methods of distributing and exchanging wealth. And there seems little chance that their powers of production will be allowed to develop as they could until these fatal defects in the structure of indus-

trial society have been somehow remedied. Meanwhile production and the standard of life advance only by fits and starts; and progress is again and again interrupted by crises which cause the industrial nations deliberately to restrict their output of goods in an endeavor to create scarcity in place of a plenty which they have not learned to control.

How does such a situation arise? Obviously the power to create more real wealth ought to be the means to a higher standard of living for the community as a whole. Obviously on the whole and in the long run it has hitherto been so—witness the great advance in the real incomes of all classes in industrial countries during the past century. But it is no less obvious that this advance is less than it might be if the existing powers of production were being used to the full, and that even so it is made precarious by the liability of the economic system to recurrent crises and business depressions.

Industrialism is fundamentally an affair of productive technique. It is based upon the discovery and exploitation of improved methods of producing wealth, primarily in the processes of manufacture but also to an increasing extent in agriculture and in the extractive industries yielding primary products. It is closely associated with an increase in the scale of production, with the development of capitalistic methods in both manufacture and marketing and with the employment of wage labor. Its secondary effects have included hitherto a concentration of the population in densely inhabited urban areas, a very rapid increase in the volume of international trade, much lending of capital for development by the more advanced countries to those less advanced and a very rapid increase in the numbers and social importance of the middle classes, including those engaged in the professions as well as in the administration and supervision of industry and commerce.

At the basis of industrialism is the machine. Both capitalism and wage employment are much older than industrialism in the sense in which the term is used in this article; and there were many factories before there was a factory system based on mechanical power. But industrialism can be said to have begun when machinery driven by a central supply of mechanical power became the typical method of manufacturing production. For from that point industry replaced commerce as the directing force of economic life, and the scale of production and the forms of business organization came to be deter-

mined by the growth and character of mechanical power.

Thus in England, where the industrial revolution proceeded a stage ahead of its development elsewhere, the industrial employer step by step ousted the merchant from his previous predominance. The typical rich men of the seventeenth and the early eighteenth century were merchants and financiers engaged in buying and selling goods gathered together from a host of small scale producers. The few big employers who did exist were not typical. The rich clothier whose memory is kept alive by his monuments and benefactions in countless English churches was not primarily an employer of labor but a merchant, although the position of the small producers who supplied him with the goods he distributed may often have differed little in effect from that of wage workers. The bourgeois class to which the aristocrats of England and France before the great changes of the eighteenth century were compelled to pay some attention was above all a class of merchants.

The industrial revolution, based upon a great series of mechanical inventions and above all else on the economic utilization of steam power, radically changed the situation. It substituted for a relatively static system of production an essentially self-expanding technique. The merchant of the seventeenth or eighteenth century had indeed an incentive to expand his sales as a means to additional profits. But there was for him as a rule no economy in buying on a large scale or in larger total amount, since the small producers who supplied him could not produce more cheaply merely because they were asked to produce more. It is a commonplace among economists that handicraft production tends to obey a law of "constant cost" and indeed that, if additional workers have to be pressed rapidly into the service in order to meet an expansion of demand, costs will tend to increase on account of both the greater demand for labor and the less skill of the new labor attracted into the trade. This was undoubtedly the position in hand loom weaving in the eighteenth century, in the "golden age" of the hand loom weavers that preceded the introduction of the power loom. The desire of the eighteenth century merchant to purchase more goods from the small producers was therefore conditional on his ability to sell more without reducing the price or even while increasing it; and this, owing to the rapid expansion of trade with both America and the East, he was in fact often able to do.

But as fast as machine production based on mechanical power superseded handicraft, the situation was radically altered. Until then the pace of production had been set by the orders of the merchants, to whom the producers were for the most part merely subservient. But now under the new factory system the industrial employer himself had not only an incentive to get as large orders as he could but also a means of stimulating the merchant's demand. For in most cases he could produce more cheaply by increasing his output; and he was therefore, unlike the handicraftsman, in a position to offer the merchant goods at lower prices if only the merchant would increase his purchases. This enabled the merchant in his turn to take new steps in stimulating demand by offering goods at lower prices to the consumer both at home and abroad, and the increased orders given by merchants under these conditions reacted upon industry. But the initiative in the new system passed more and more into the hands of the industrial employer, whose offers of more goods at lower prices became the driving force of material progress. From this point of view the coming of industrialism was in manufacturing industry the transition from a condition of constant to one of decreasing costs.

The industrial employer, who thus became the pivot of the new economic system, found himself urged on to new conquests by the pressure of the machine itself. He had to be abreast of his competitors in reducing prices; and this was a perpetual incentive to him both to increase his scale of production and to avail himself of the improved machines that were constantly being produced. There was doubtless, even when the industrial revolution was at its height, an optimum size for any given business beyond which it could not grow without loss of productive efficiency. But as the optimum was growing larger with very great rapidity, the great majority of businesses were probably well below it and racing to catch up. Accordingly machine technique gave the employer the greatest possible stimulus to increase his scale and quantity of production in order to cut his prices and thus enabled the merchant to take full advantage of the elasticity of demand, especially in overseas markets.

This last qualification is necessary because the strong competitive pressure on employers to reduce costs and prices, while it was a powerful stimulus to improved productive technique, reacted unfavorably upon the level of wages and

therefore upon the consuming power of the domestic market. The employer could cut his costs not only by improving the efficiency of production but also by reducing wages or taking a firm stand against their increase; and this course appealed strongly to the less efficient employers, who were threatened otherwise with extinction. Relatively few employers could be brought to believe in Robert Owen's doctrine of the economy of good wages and conditions; and perhaps relatively few were efficient enough to make it true in their own case. The rapidly falling costs of the new industrialism were based on low wages as well as on a rapidly improving technique of production.

There was a second and no less powerful reason why wages and consuming power in the home market remained low in the period following the advent of industrialism. The new employers under a constant necessity of improving their machinery and expanding their scale of production were avid for fresh supplies of capital which they could apply to these purposes. But capital was hard to find in the days before the recognition of limited liability and the working out of the modern solution of joint stock companies and corporations based on widely diffused and easily transferable shares. The employer was therefore compelled to expand his business out of his own resources as far as possible, living frugally himself and putting back his profits as capital. Under this pressure he was disposed to resist demands for increased wages as sheer waste, the devotion to useless expenditure of resources badly needed for the expansion of output.

It is true that money thus saved was spent on buildings and machinery. But the constructional trades, powerfully stimulated as they were by these new conditions, did not quickly respond to the new technique or pass over from handicraft conditions of constant cost to conditions of decreasing cost. Building remained and remains in part even today a handicraft industry in which prices tend to rise rather than fall with any quick expansion of demand. And machine making continued for a long time to be a highly skilled job, demanding the services of highly skilled craftsmen who were limited in number and incapable of being reorganized on a basis of mass production. Not until the methods of producing iron and steel and of forging and casting had been revolutionized in the latter half of the nineteenth century did the engineering trades become at all generally subject to the conditions

of decreasing cost which had come to prevail in the cotton trade more than fifty years earlier. Consequently spending on building and machinery did not expand production in the same degree as spending on consumers' goods, which were on the whole more easily mass produced. This helps to explain the intense concentration of the new industrialism on the development of exports and the constant search for new markets abroad.

Industrialism grew then at first chiefly in the textile trades, making Manchester the effective capital of the new industrial world. It was no accident that the economists who based their doctrines upon industrialism in this first phase came to be called the Manchester school or that their outstanding dogma was a supreme faith in *laissez faire*. For their own experience seemed plainly to demonstrate the self-expansive nature of the new industrial system, its capacity constantly to increase the supply of goods while lowering their cost, and the value of competition in weeding out the inefficient producers and compelling the survivors always to adopt the latest advances in technique on penalty of being left behind in the race. What could be better than a self-acting system which at once benefited the consumer by lowering prices, rewarded the efficient with the high profits of the pioneer and weeded out the inefficient who misused the resources of production? It was not clearly seen at this stage how far those results depended on the superior efficiency of Great Britain over other countries, of whose markets she was therefore able to take her pick, or how low wages must retard the growth of consuming power in the home market. These difficulties came later; and before they had been fully realized the character of industrialism had been greatly changed.

For in time the new technique was extended from industry to industry until it came to embrace the industries producing capital as well as consumers' goods. The development of railways played a dominant part in this transformation, not only because the railway enabled the interior of countries and continents to be opened up for economic exploitation but also because the demand for railway material gave an enormous stimulus to the metal trades and compelled them to devise and resort to mass production methods. The new steel making processes of Bessemer, Siemens, and Gilchrist and Thomas gave the metal using industries for the first time a reliable and durable raw material to which methods of standardized production could be applied and

thus made possible the development of large scale enterprise in the engineering and kindred trades as well as in the translation of shipbuilding from wood to metal. The same causes revolutionized the coal industry, greatly expanded already in the earlier phases of industrialism, and created a new and powerful grouping of "heavy industries" to balance the older textile trades. With the coming of these new forces the authority of Manchester began to wane; and industrialism, no longer so fully wedded to *laissez faire* and competition, entered on a new phase which led on before long to the growth of trusts and combines, the recrudescence of tariffs and in general to a renewed attempt at regulating just those processes of production and sale which the Manchester school held should be left severely alone.

The explanation of this difference is not hard to find. In the first phase of industrialism the maximum expansion of wealth could be secured by concentrating as far as possible on those forms of production which most clearly showed their obedience to a law of decreasing costs—in other words, primarily upon textiles. This could be done as long as there was adequate scope for the expansion of the sales of industrialized countries in markets where native producers were well behind in efficiency. But in time it became clear that this expansion could not continue unabated unless steps were taken to develop the complementary powers of production of these less industrialized countries so as to increase their supply of goods which they could give in exchange for the mass produced manufactures of industrialism. The railway was the great instrument of this development, opening up in the less industrialized countries vast new sources for the supply of raw materials and foodstuffs. Incidentally this expansion helped greatly to raise wages in the industrialized countries, both because it enabled export to go forward at a greater pace and because it secured an abundant supply of cheap foodstuffs. In the fourth quarter of the nineteenth century there was a rise in both money wages and the purchasing power of money with the result that a great stimulus was given to consumption in the home markets of the industrialized countries.

In building railways and in supplying railway material and later in the supply of machinery produced on a large scale the industrialized countries advanced to a new type of export trade vitally different from the old. The sale of cotton textiles or woolen goods was essentially a cash

transaction to be balanced at once by an equivalent purchase of goods. But the sale of railway material and other classes of capital goods could not be conducted on these terms, for the purchase price could be paid by the buyers only if and when the railway or the factory became productive. Payment for such exports had to await the economic development of the countries to which they were sent and had then to be made in the products which their use had caused to be created. Consequently this second phase of industrialism was marked by a great increase in the export of capital—that is, in the loan of capital in order to make possible the export of capital goods—from the industrialized to the less developed parts of the world. Great Britain especially exported huge masses of capital to all parts of the world and above all to its own dominions and India, to the United States and to the South American republics. Capital was exported also to the continent but was as a rule more speedily repaid and railways and factories built with British money were bought back by native investors.

It would be far beyond the scope of this essay to describe the reactions of this growth of foreign investment on world politics and international rivalries and on the development of economic imperialism; here only its effects on industrialism in a narrower sense can be considered. It made possible a very rapid growth of the industries producing capital goods and speeded up in them the development of an intensified technique of mass production. Whereas in the first half of the nineteenth century the typical instance of large scale production was a cotton mill, by its close the types of large scale enterprise were to be found above all in the heavy industries in the great steel making plants of Bethlehem or Middlesbrough, the great armament factories, the shipyards and the great coal mines already closely linked with steel. In the heavy industries there was already a growing tendency for combination to replace competition and for the size of the business unit far to transcend that of the single manufacturing plant.

Even before this period technical development had begun to influence business structure. As has been noted, the earlier industrialists were sorely hampered by shortage of capital. There was no investing public in the modern sense and broadly speaking no one could invest money in industrial development unless he either lent it to a business man on his personal security or became a partner in the business without the

protection of limited liability and therefore at the hazard of his entire fortune. The gradually extended recognition by law of joint stock organization and limited liability removed this difficulty and opened the door to industrial investment by all who had savings or resources to spare.

Joint stock and limited liability not only increased immensely the total resources available for business expansion but also removed the limits to the size of the capitalist concern. Before this the entrepreneur's difficulty had lain in gathering together enough capital to equip and run a plant large enough to take full advantage of the economies of large scale production. But now he was able not only to do this but readily to expand the scale of business organization so as to bring a number of separate plants under a unified control. While the scale of business organization was still expanding under the inherent necessities of improving industrial technique, it was now able not only to reach these limits but also to pass beyond them. Indeed, as the larger concerns were often at an advantage both in raising fresh resources in the capital market and in getting credit from bankers and others, to some extent a premium was put on a scale of business organization considerably larger than that made necessary by the technique of production itself. In the early days of the trust movement there was a marked tendency for the increase in the size of the business unit to be dictated by financial rather than technological considerations, and this tendency was strongly manifested again in the troubled years after the World War in the gigantic mergers and concerns organized by Hugo Stinnes in Germany and in the unwieldy aggregations of businesses gathered under one control by Vickers or Lord Leverhulme in Great Britain.

There was also, however, a new technological tendency leading toward an expansion of the business unit on a scale very much larger than that even of the largest single plant. Under the earlier conditions of industrialism the plant was the essential technical unit and each plant could face its own technical problems independently of the rest. But the modern development of industrial technology is making the separate plants growingly interdependent in a variety of ways. In the first place, it is often essential, if the maximum economy in production is to be secured, to group together in very close relation and under unified control plants engaged in complementary industrial processes—in order,

for example, to save intermediate transport costs on bulky half finished goods or in order to utilize a waste product, such as blast furnace gas, in a subsequent manufacturing process. Secondly, it is often advantageous from the standpoint of economic production to reduce and simplify the varieties of a particular commodity placed on the market and for that purpose to secure at least as much unity of control as is necessary. Thirdly, the maximum economy is likely to be realized in many trades if each plant instead of producing a wide variety of goods in competition with the rest is in some degree specialized to the manufacture of a limited range of products and thus enabled to produce within this range upon a larger scale.

The first of these technological requirements leads to a growth of vertical combination; that is, the linking up of successive stages of production under a common control. The second leads to fairly loose horizontal agreements between firms at the same stage of manufacture but need not disturb the independence of each distinct business. The third leads to much closer horizontal integration, as it is found in such businesses as Imperial Chemical Industries, Ltd., or the English Steel Corporation, Ltd., or the Vereinigte Stahlwerke, A.-G., in Germany.

Karl Marx, whose analysis of the industrialism of the first half of the nineteenth century remains the most penetrating study of capitalist development, has often been arraigned as a false prophet because he predicted a growing concentration of capital and an increasing polarization of the two rival economic classes of capitalists and laborers. It is indeed the case that there is in modern industrialism no sign of the disappearance of the small employer and that the growth of joint stock organization has increased immensely the number of small part proprietors of capitalist business. But, on the other hand, the small employer has become increasingly an agent or subcontractor or a hanger on of large scale business; and the great body of shareholders in modern industry has literally no say at all in its conduct or control. There has been a tremendous concentration if not of the ownership at any rate of the control of capital. The old personal nexus between employer and worker has been snapped; and the real struggle for power today is to an ever increasing extent between the few controllers of large scale industry and finance and the organized force of the labor movement, with the middle classes and the small investors largely passive spectators of the

conflict. Even the growing body of industrial technicians, who should, one would suppose, occupy a key position in the modern world, have been able to assert themselves but little as an independent force. They have been in the main merely the executive servants of large scale capitalism, although in many cases their personal sympathies might range them rather on the side of labor.

It has been pointed out how industrialism in its first phase concerned itself mainly with the sale of cheap consumers' goods in the markets of the less developed countries and how in its second phase it supplemented this form of trade with the sale of capital goods fostered by the lending of capital and credit overseas. The second of these processes like the first cannot be expanded indefinitely without check. The first fails when it reaches the limits of the power of the less developed countries to offer more goods in exchange until their own productive resources have been more fully developed. This check leads on to the second phase; and this in turn fails when the burden of external debts upon the less developed countries becomes so large as to check further loans. Moreover as more and more countries pass under industrialism their rivalry in selling goods and lending capital to the less developed areas fills up the available markets more swiftly. The advanced countries find growing difficulty in selling their goods and lending their capital overseas on favorable terms. They scramble for openings and concessions; and, as Marx foresaw, international rivalries are intensified and cries of "overproduction" raised.

All this time the technological revolution knows no pause. It is always impelling industrialists to produce on a larger and larger scale and to create plants, based on heavier and heavier capital expenditure, which can be operated at a profit over and above the interest charges involved in their construction only if they are able to work full time and to find buyers constantly for their full output. Post-war Germany, for example, when it rationalized many of its industries with borrowed American capital, created a productive machine capable of producing very cheaply while it was fully employed, but only at high unit cost if the volume of output had to be cut down through a failure of markets. The same conditions apply to many types of business in the United States and Great Britain and in every advanced industrial country.

It is therefore plain that the technical conditions of modern industry imperatively demand

from the world of today an increase and a stabilization of consuming power. In default of this many of the greatest technical improvements are apt to mean not low costs but high because of the heavy expense of the capital equipment on which interest has to be paid. These high costs serve further to restrict demand both because they result in high prices, often artificially maintained, and because they throw potential consumers out of employment and so cut down their purchasing power.

But the increase of consuming power up to the expanding limits of productive capacity is a matter that industrialism under present conditions finds very hard to arrange. Herein lies the chief importance for the world of the gigantic experiment in socialist industrialism that is now proceeding in Soviet Russia. The Russians have set themselves not only to bring their industries up to the very last point of modern technological development—largely with the aid of American engineers—but also to industrialize in their vast country with its millions of peasant proprietors the technique of agricultural production. The socialized factories of Russia are of far less potential significance for the future of the world than its socialized farms.

But the importance of the Russian experiment does not lie mainly in the mere fact that the Russians are forcing on industrialization at a hitherto unprecedented pace but rather in the fact that they are doing this under conditions which insure an outlet in consumption for everything that they are able to produce. With the entire control of production and distribution centralized those in control are able to order what things shall be produced and in what relative quantities and also to distribute enough purchasing power among consumers to insure a sale for all that can be produced. All this of course can be done only within certain margins of error and subject to the export of enough goods to pay for what must be imported. But with the export trade in the hands of the state exports are not restricted to those that can be sold at a money profit. Foreign trade is in essence barter, and the state can put on imports prices calculated to represent the value of the exports needed to pay for them. Under these conditions Russia appears to be immune from the fears of overproduction or underconsumption which beset the rest of the industrial world. To whatever other objections its economic system may be open, it seems to have solved the problem of balancing production and consumption and thus

have set itself free to make the fullest use of every technical improvement in the arts of production.

This example of Russia raises a fundamental issue. How far are industrialism and capitalism the same thing viewed from two different aspects? Or how far are they two different and separate things connected only at a particular stage of the world's evolution? Historically the connection is close, but they can by no means be identified. For, as has been pointed out, capitalism existed long before industrialism and took at first a mercantile rather than an industrial form. It is arguable that as capitalism preceded industrialism and was modified by its coming so industrialism is destined to outlive capitalism, taking on a new shape, as in Russia, under socialist control.

For manifestly socialism, the child of industrialism, will not speedily take up arms against its parent. Industrialism bred socialism because it required the concentration of the workers into factories, their subjection to a common discipline of monotonous labor and an opposition between their demand for higher wages and the demand of the owners of the instruments of production for interest and profits. But socialism is not hostile to industrialism; basing itself on the demand for a higher standard of life for all, it therefore cannot afford to dispense with the fullest possible use of every technical device which will serve to increase production and lighten the burden of labor. It is true that the workers today may sometimes oppose the introduction of labor saving devices or other instruments of higher production through fear of unemployment or out of hostility to the capitalist controllers of industry. But if under a socialist system they get the instruments of production into their own hands, as they have done in Russia, they are bound to be on the side of changes designed to increase output or to lighten labor. Possibly at a later stage of the world's history, when the problem of producing enough to afford to all a satisfactory standard of material living has been fully solved, the mass of the people may declare against industrialism and express in deeds its preference for some other system; but assuredly that time is not yet. The advent of socialism would intensify and not retard the progress of industrialization.

This remains true despite the common indictment of industrialism that it condemns the great mass of the workers to a life of dull, monotonous and even irksome toil. It is easy to contrast the

skilled, varied and interesting labor of the handicraftsman with the deadening monotony of purely repetitive machine minding. But before industrialism arose what part of the whole population consisted of skilled handicraftsmen? Was it ever as large proportionately as the number of persons, including those in supervisory and professional work, to whom the modern economic system affords interesting and colorful employment? If the modern machine minder is to be contrasted with the guildsman of the Middle Ages, he should be contrasted with the mediaeval peasant as well. And if one is to stress the effects of machinery in destroying craftsmanship, it should not be forgotten what effects it has had—and the far greater effects it might have under proper control—in eliminating hard, disagreeable, unskilled and brutalizing labor.

The modern world cannot yet afford to restrict its use of machinery, both because there is much drudgery still to be eliminated and because the growth of working class power means an ever more insistent demand for a high and rising standard of life. If therefore capitalism gives place to socialism, the first phase of socialism will be more intensely industrialist than capitalism has ever been, because for the first time the whole community will be pulling together toward higher production over the whole field of industry and agriculture as well as in the management of domestic affairs to remove the burden of the drudgery of housekeeping now laid on half the human race.

It does not follow that industrialism need in its later phases preserve certain of the features most prominently associated with it up to the present time. Urbanization is still proceeding unchecked in the industrial countries, but its causes are now social quite as much as economic. The development of cheap road transport and of widely diffused electrical power is removing the technological reasons for close urban concentration of industry and preparing the way for a rediffusion which will enable it to be carried on under far healthier conditions. Little advantage has yet been taken of these opportunities, because no less essential to business than accessible power and cheap transport is an available supply of labor with sufficient housing and kindred accommodation. The business that wants to set up in the country has to attract its labor and often to house it and help provide it with the amenities of life. It cannot readily take on fresh workers to meet a rush or discharge workers when times are bad for fear of losing them

altogether. Accordingly only businesses catering for a stable demand are able to move out of the towns, and even such businesses are often deterred by the difficulties and initial capital costs.

Nor is this the only factor. Urban life has for the worker many attractions: its cheap amusements, varied society, the hurry and bustle of life and a sense of nearness to the center of things. It increases his freedom to change his job and his independence of his employer, whose eye cannot always be on him out of working hours. Men and women leave the country for the town from preference as well as from necessity, and business tends to stay near the sources of labor supply.

But here again a socialist system might make a great difference. For with the power of coordinated planning of industry in its hands it would have also the power of town and regional planning. It would be able, as the Russians are endeavoring, to create new small towns in the country areas and to equip them with the means of a varied and satisfying life, as only a few capitalists here and there have tried to do with garden villages and the like. Even so the socialist state would not succeed in decentralizing and de-urbanizing industry if the preference of the great mass of men was for living close together in great towns; but at least the other obstacles in the way of decentralization could be removed.

If under a socialist system industrialism should be intensified in order to provide a higher standard of life, there would nevertheless arise also a keener demand for leisure. The necessity of reconciling these two demands would only increase the pressure to make the most productive use of labor, to push rationalization to the furthest possible point and to eliminate all preventible waste of human energy. Hours of labor would doubtless be reduced; but the tendency would be to put more labor into each hour and then to aim at reducing the burden of this labor by increased mechanization of processes. If mechanization were applied with the conscious object of making labor less hard and intense as well as more productive, a great deal that is barely attempted as yet could be readily accomplished. The demands for more leisure and for more production do limit each other in some degree, but they are by no means incompatible.

Industrialism then does not connote capitalism, although it is historically connected with it. The essence of industrialism lies in certain technical forms of productive activity which are capable of being directed to various economic

ends and by radically different forms of economic organization. It may be, as Marx insisted, that capitalism has played an indispensable historic role in the development of industrialism; because only under the control of the autocratic individual entrepreneur could the new technical forces have found free play. Certainly it needed a strong directing authority to break up and replace the mercantile capitalism of the pre-industrialist era, to destroy the domestic system of small scale production and concentrate the workers in factories and towns, to accumulate capital at the expense of the immediate standard of living and to force upon the state an attitude toward industry consistent with the free growth of the new powers of production. Certainly the state itself, based on the aristocratic power of the landed classes, was at the time of the technical revolution quite unfitted to assume this directing role; and certainly the working class was equally unfitted, for it learned cohesion and became a force only as a result of its experience of concentration and discipline under the new industrial system. Capitalism was therefore for the countries that led the way into industrialism an indispensable stage; but it does not follow that industrialism once created depends on the survival of capitalism for its effective operation.

Indeed, to use again a Marxian phrase, there are signs today that capitalism has become a fetter upon the limbs of the industrial giant, holding back industrial development and checking the increase of production for fear of glutting the market. For the capitalist system of productive organization is based essentially on the incentive of private profit. The capitalist entrepreneur will not and cannot go on producing goods unless he can make a profit by their sale. His market is therefore limited not by the needs of the consumers but by their willingness and ability to pay him a remunerative price. As the prices he can get tend to fall as the supply of goods on the market is increased, the entrepreneur is disposed to retaliate by restricting production in order to keep them up to a remunerative level. But this reacts on his costs, which tend to decrease with larger and to increase with smaller output. Everywhere in the world today frantic efforts are being made to hold stocks of goods off the market, to buy up "redundant" factories in order to close them down and to maintain prices by valorization schemes at the cost of limiting demand. These are surely signs of something amiss with the capitalist world.

Some say that all would be well if capitalists

would but abandon their attempts to control the market and go back to competition and *laissez faire*. But there is no chance of their doing this, because so many of the factors of production that they have to use are now under external control. The state limits their authority by legislation, and trade unions are too strong both economically and politically to allow wages to be governed by the mere higgling of the market. Moreover, even if all these obstacles could be removed, where could world capitalism hope to sell the vast mass of goods industrialism is capable of producing unless it were prepared to let wages rise to a point fully corresponding to the growth of productive capacity? And that would ruin the capitalists of any one country unless that country were isolated from the rest of the world or unless all other leading countries did the same.

A return to *laissez faire* is impossible. The concentration of capital needed for the full exploitation of modern productive resources is too great to be left uncontrolled by the state; for those who have this concentrated capital in their hands will assuredly control the state unless it controls them. The attempts of capitalist combines to control production and prices are apt to defeat themselves, creating artificial scarcity, depression and unemployment in place of the plenty which man's technical command over nature is making possible. Is not the truth then that partial controls set up by groups of entrepreneurs for the maintenance of profits will have to be gathered up into a wider unified control of industry based on maximum production balanced by an equivalent emission of consuming power? There is nothing in this idea inconsistent with the development of industrialism. On the contrary, it seems that industrialism has now reached a stage at which its fuller development requires above all else coherent planning and unified control from the standpoint of consumption as well as of productive technique.

G. D. H. COLE

See: INDUSTRIAL REVOLUTION; ORGANIZATION, ECONOMIC; MACHINES AND TOOLS; TECHNOLOGY; FACTORY SYSTEM; LABOR; POWER, INDUSTRIAL; LARGE SCALE PRODUCTION; MARKETING; CAPITALISM; CORPORATION; COMBINATIONS, INDUSTRIAL; RATIONALIZATION; LAISSEZ FAIRE; GOVERNMENT REGULATION OF INDUSTRY; SOCIALISM; GOSPLAN; LABOR MOVEMENT; FOREIGN INVESTMENT; IMPERIALISM; URBANIZATION; REGIONAL PLANNING; LEISURE.

INFANT MORTALITY. *See* CHILD, section on CHILD MORTALITY.

which seven volumes were composed by him, the others by his pupils.

Since his youth d'Arbois de Jubainville had been interested in the history of law. He had indeed begun by studying law at the École des Chartes. He now returned to the law by way of philology and published a famous work, *Recherches sur l'origine de la propriété foncière et des noms de lieux habités en France* (Paris 1890). Thereafter he occupied himself almost exclusively with Celtic law, which he alone was equipped to study at its sources since he was both Celtist and jurist. He devoted particular attention to Irish law, especially the *Senchus Mór*. His "Études sur le droit celtique" (vols. vii-viii of *Cours de littérature celtique*) and his *La famille celtique* (Paris 1905) are among his most important works in Celtic law. As historian he dissipated many of the fantasies concerning the ancient Gauls, and as jurist he put the study of Celtic law upon a scientific basis.

PAUL COLLINET

Consult: Collinet, Paul, in *Nouvelle revue historique de droit français et étranger*, vol. xxxiv (1910) 399-403; Loth, J., in *Revue celtique*, vol. xxxii (1911) 453-74; Morel-Fatio, A., in *Revue internationale de l'enseignement*, vol. lxvi (1913) 162-75, and 245-55; Chénon, Émile, in *Société Nationale des Antiquaires de France*, Paris, *Bulletin* (1912) 69-120, with bibliography.

JUDAISM. Nineteenth century historians of religion, especially Christian historians, have used the term Judaism to denote the religion of the Jews since the time of Ezra (c. 444 B.C.) in contrast to the pre-exilic religion, which they called the religion of Israel. This attitude was prompted primarily by the belief that postexilic Judaism was a retrogression, due to foreign influences, from the teachings of the prophets and that the true prophetic tradition was continued in the religion of Christianity. Closer study of the sources has revealed more and more clearly, however, that Judaism is but a continued development of the teachings of the prophets. Like every other religion Judaism passed through a certain historical evolution, throwing off old elements and acquiring new ones. Foreign influences were always operating—from the earliest influences of Egypt, Babylonia, Assyria and Persia through the Hellenistic period, the contacts with Arab culture in the Middle Ages, the humanistic tradition of the Renaissance down to the influence of Protestantism on the development of reform Judaism. One or another aspect or tendency may have been especially stressed or become dominant, but until the close of the

eighteenth century there was never a radical break with the main tradition and characteristic form which Judaism assumed during the period from Ezra to Akiba (c. 135 A.D.). Rather it was constantly reinterpreted in the course of centuries and adhered to with astonishing fidelity.

The most primitive form of the religion of Israel was developed probably during the nomad period. It was characterized by a belief in demonic powers and spirits, by distinctions between clean and unclean animals and by adherence to certain death customs. It already contained, however, the germs of the ethical ideas later developed by Moses and the prophets, and monolatry rather than polytheism prevailed. With the entry of the Hebrews into Canaan and their development as an agricultural people came also a development of a cultus marked by sacrifices, festivals and sanctuaries. This period is also marked by a struggle between the religion of Yahweh and the continued attempts at incorporating the worship of local deities.

It was in connection with this struggle that there appeared in Israel a group of men unique in the history of the ancient world who brought the development of the Hebrew religion to its highest point. The prophets were men of diverse social classes whose authority was based on the fact that they were responsible to their God alone and who were independent and courageous enough to proclaim what had been revealed to them, even though their prophecies announced serious disasters involving the ruin of the whole nation or the destruction of the temple. Their teaching was marked by a pure ethical monotheism and universalism, a passion for social justice and a repudiation of the sacrificial cult as the most distinctive mark of the Hebrew religion. But the prophets were never able to establish the complete supremacy of their ideas and the cruder forms of popular belief persisted side by side with these more spiritualized religious and ethical precepts.

After the Babylonian exile the leadership of the people became hereditary in the priestly house of Zadok. By this time too the Law had been reduced to writing and through the efforts of Ezra and the traditional Men of the Great Synagogue had been restored as the most essential factor in the Hebrew religion. This Mosaic law circumscribed the activities of the priestly class and became the most effective means of making the teachings of the prophets the inheritance of the individual. The task of furthering this usage of the Torah (Law) was assumed by

a new order of scribes, who came from the people and who by their personal qualifications proved their fitness for this high calling. The prestige of the scribes grew especially during the period when the hereditary priesthood temporized with the inroads of Hellenism. The scribes assumed the leadership of the middle class and peasantry in a successful fight for the preservation of their national and religious integrity. When a new priestly class developed which gathered about it the Sadducee aristocracy and founded a new dynasty, they were challenged by the pietists of the middle class, now known as Pharisees, who continued the tradition of the scribes. The Pharisees set up an ideal based on the democratic belief in universal priesthood and on the conviction that man's entire life and activity should be permeated by a sense of piety. It was at this time too that the concept of an oral tradition in addition to the written law came to the fore. The Pharisees, in opposition to the Sadducees, affirmed the divine and binding character of the oral law as developed by the scribes and the rabbis. Although this doctrine was at first vehemently contested by the various sects yet it was this doctrine more than anything else that preserved the vitality of the Torah and made possible the development of Jewish life. The Pharisaic conception was the only one that was able to maintain itself after the fall of the Jewish state and the destruction of the temple. The teachers of the Torah became henceforth the unchallenged leaders of the people.

The Pharisees, later known as *tanaim* and then as *amoraim*, were likewise men of diverse social classes; they were kept together and enabled to exert their influence over the people by their common work and ideal. It was they who transmitted and developed the oral tradition and it was their doctrine and their opinions that became decisive for the Jews of the whole world. Their decisions determined the laws, customs and religious ceremonies of Jewry. These, however, were never promulgated in either dogmatic or mandatory form; they were accompanied by statements of the controversies and discussions which their formulation had required, in order that later generations might be able adequately to understand the mind and will of their predecessors.

The opinions and decisions of the *tanaim* and *amoraim* are contained in what has come to be known as the Talmud, a vast encyclopaedic storehouse of legal opinions, controversies and

decisions; of ethical precepts and maxims; and of legends, history and traditions, which received its definite written form about the year 500. Only a secondary place was given in the Talmud to the treatment of religious creed, for in this sphere considerable latitude was allowed. Chief attention was directed to the practises which were to regulate the legal and ritual life of the Jews. With the exception of the Karaites, who, beginning in the eighth century, formed a separate sect and refused to recognize the validity of the oral tradition, all the Jews willingly submitted to the authority of the Talmud. The initial success of Karaism (today it has about 12,000 adherents) was of short duration. The whole movement soon became culturally petrified. The principles of rabbinical Judaism, on the other hand, made possible a continuous cultural development. The Talmud met with recognition but never with blind worship; no matter how strong the bonds of tradition, alert and eager commentators and codifiers always started afresh and by their work tried to do justice to the changes in social and cultural conditions. Because there were no rigid and absolutely binding rules of interpretation and no central or final authority, each commentator decided on the basis of his personal convictions how much weight to give to the work of his predecessors. In most cases, however, the commentators endeavored to find substantiation for their views in the Bible and the Talmud or in the work of a previous rabbi; it was seldom that they dared to contradict an uncontested opinion in the older literature. Codification of the vast material soon proved to be necessary, but even the *Mishna torah* of Moses Maimonides (1135-1204), which is distinguished for its completeness and logical unity, did not meet with general approval. The *Shulchan aruch* of Joseph Karo (1488-1575) also aroused great opposition at first, but it was gradually accepted after the glosses of Moses Isserles (died 1572) had been incorporated into it and after it had been further modified and reinterpreted by numerous commentators. In orthodox circles the *Shulchan aruch* thus amended still enjoys decisive authority. The critical attitude toward it which Chassidism originally assumed was soon abandoned and its authority was submissively acknowledged.

Traditional Judaism as developed in the Talmud, the rabbinical literature and codes of the succeeding ages came to regulate the entire life of the Jew. Judaism made no distinct cleavage

between the sacred and secular aspects of life. Problems of morality, family life, hygiene, dietetics, business relations, sexual life, education and dress as well as of the more distinctly religious elements of ritual were encompassed within the range of rabbinic authority. All the legal minutiae were created by the rabbis as a "fence around the Law" to assure the preservation of the essential features of Judaism. Attacks have been made on this legalism of rabbinic Judaism, but it was this body of doctrine that supplied the independent Jewish communities scattered throughout the world with what Heine called a "portable fatherland," with a common possession which gave to the entire Jewry a common consciousness and a stamp of unity. This traditional literature of the Jews was the source both of the cultural life from which they derived their spiritual unity and of their continued cultural and spiritual progress. The system performed a further service for Judaism in identifying religion with the earthly life and in general removing the religious struggles within Judaism from the realm of dogma to that of the concrete, thus liberating human energy for human activity.

Side by side with the development of rabbinic Judaism there developed a doctrine of mysticism known as the Kabbala. Indications of these mystic strains in Judaism are already evident in the Talmud and in the Midrashic literature. The first important book of the Kabbala was the *Sefer yetzirah* (Book of creation), which became current about the ninth century. Kabbalistic literature continued to be developed among the Jews of France and Germany and in the sixteenth century flourished especially in Palestine, where it was cultivated by the schools of Moses Cordovero (1522-70) and Isaac Luria (1535-72). The *Zohar*, a work of unknown authorship, which became current in the fourteenth century, came to be considered as the most sacred of Kabbalistic writings. The Kabbala was developed along two lines. On the one hand it flourished as a metaphysical system concerned with the doctrine of divine emanation, with the concept of God as the Infinite (*En-Sof*), with the ten intermediaries, or *sefirot*, of God and with the doctrine of transmigration of souls (*gilgul*). Alongside of this speculative mysticism there developed a practical Kabbala which stressed the sinfulness of human nature, built up a system of demonology and magic, encouraged asceticism and was above all concerned with Messianism and the problem of the salvation of

Israel. It was this Messianic strain which inspired the later activities of Sabbatai Zevi and the Frankist sects. In a very much modified form the Kabbala was also one of the sources of the movement of Chassidism (*q.v.*). Related to the Kabbala was the didactic literature (*musar*) which grew up to satisfy the more emotional needs of the masses. The *Sefer chassidim* of Samuel Chassid (1115-80) and his son Judah Chassid (1150-1217) is the most typical example of this aspect of Judaism. It is a mixture of noble ethical principles with popular superstitions concerning evil spirits and demons. Generally speaking, both of these currents served as reactions to overdeveloped rationalism and as a correction for the overassertion of legalism. They had distinct social roots also, in that their appeal was greatest among the more humble classes.

The religious institutions of the Jews varied with the different periods of development. The centralization of the cultus at Jerusalem during the period of the first kingdom resulted in the displacement of the old local sanctuaries by the temple in Jerusalem. The temple became the central religious institution of Jewish life where all the important rites were to be performed. During the Babylonian exile the Jews preserved their religious traditions in assemblies where the scriptures were interpreted, the psalms or other religious poems recited, confessions made and prayers said either collectively or individually. This gave rise to a new religious practise, the prayer service, which from a casual and purely exilic device became a permanent practise recognized in Palestine and one of the most important innovations in the field of religion. There was brought into being a form of religious service which was independent of consecrated places, buildings, objects, classes and persons and which requires only the will of a group.

These assemblies knew no distinctions of rank; all their members no matter whether they were natives or strangers were treated as equals; even women were at first not excluded from the performance of certain functions. With these congregations the Jews created an extremely mobile type of institution. The synagogues, which were centers both of religious worship and of learning, accompanied the Jews in all their migrations, springing up spontaneously everywhere. It is from Judaism that its two offshoots, Christianity and Islam, borrowed this religious institution.

The prayer service acquired such an impor-

tance in Jewish life that it found its way also into the temple at Jerusalem; and when the temple was destroyed for the second time, the synagogue, this "sanctum in miniature," was sufficiently popular to offer in its devotional practices a substitute for sacrificial services. The victory of the secular synagogue was by this time complete, despite the few survivals of temple customs and the slight privileges which were granted "for the sake of peace" to the descendants of the old priests. The emergence of a class of professional readers was caused not by a desire to create a consecrated caste but by the technical needs of recitation. Even today all synagogal functions are open to every member of the community. The difference between laymen and ministers which characterized the synagogue in the last century marks a definitely backward step.

Evidence of proselytizing efforts on the part of Jews is found as early as the Exile period. During the Hellenistic period Jewish missionary activity was carried on through the Jewish literature in Greek, through the synagogue with its readings from the Bible and through personal influence, especially of the Jewish merchants. Conversion to Judaism was quite frequent during the early years of the common era. After the triumph of Christianity Jewish proselytizing was carried on chiefly in non-Christian countries, like Arabia and Abyssinia. The conversion of the Chazars is the most important instance of mass conversion to Judaism. A more subtle form of proselytizing is evidenced in the Judaizing sects of Protestantism and those of Russia. It was not until the time of Moses Mendelssohn that the doctrine was formulated whereby no one not born into the Jewish religion should be converted to it.

An attempt to construct a generalized statement of the leading social and ethical doctrines of Judaism is made difficult by the fact that the Bible and rabbinic literature abound in conflicting statements and opinions which can be used to support contradictory views on the same problems. The difficulty is intensified also by the absence of any central authority or court of last resort in the formulation and interpretation of religious problems. Certain leading principles have, however, been fairly constant; and in instances where earlier conflict existed one or the other opinion has come to be stressed and accepted under the influence of external conditions and the historical experiences of the Jewish people.

The basic idea of Judaism is its belief in revelation, that God revealed Himself to the people of Israel, that He disclosed to them His nature and will and that He made a covenant with them. The idea of God in Judaism is a direct continuation of the Mosaic concept of Yahweh as a single spiritual God of whom nothing but Being is predicated, and who is never worshiped in the form of images or statues. This doctrine precluded all polytheism, all worship of female deities with its consequent lasciviousness, all worship of animals and of the heavenly bodies. It forbade the worship of nature with its good and evil forces. It forbade child sacrifice, prohibited every form of magic and witchcraft and rejected ancestor worship and ancestor incantations.

The major prophets conceived of Yahweh as perfect and holy, as the principle of all spirituality; that is, as the one and only God. They dedicated all their efforts to supporting this conception and to eliminating all anthropomorphic elements from Judaism. There was thus established a solid foundation for the monistic conception of God and for the repudiation of all anthropomorphism which was able to withstand the force of foreign influences during the period of the Exile. No definite attitude was ever adopted concerning the question of angels and demons. The scribes paid little attention to them; following the old Biblical writers they regarded them simply as "messengers" and "instruments" of God. In the popular imagination, on the other hand, these beings grew in number and significance because of Babylonian and Persian influences. They were regarded by the people after the fashion of the retinues of earthly kings at court although still as subordinate creatures of God, whose unity was not thereby in the least impugned.

In Greek culture Judaism for the first time came into contact with a systematic and philosophic doctrine of God. The antithesis between immanence and transcendence, the dualism between God and the world, was most keenly perceived by the Greeks, who solved the difficulties involved by assuming the concept of a mediator. Greek culture gave rise to Philo's doctrine of the Logos—the Son of God—and also to the gnostic conception of the demiurge—God the Creator who, because He is an emanation from the perfect, infinite and fathomless God, is able to bring about a union with the material world. These doctrines of the mediator and the Son of God created an impassable gulf

between Christianity and Judaism. Gnosis was of course revived and further developed during the Middle Ages, especially in the Kabbalistic tradition, when the belief in God seemed too abstract and the way from God to man too long and difficult. The gnostic solution was preceded by a philosophic examination of the problem of the divine attributes, finally solved by Moses Maimonides. In order to preserve the idea of the strict singleness and unity of God, Maimonides resorted to the assumption that only negative propositions can be predicated of God and that even these negations can have only a figurative meaning. It is true that the philosophy of Maimonides and the study of philosophy in general met with strong opposition in rabbinical circles and that the Kabbala with its appeal to the human imagination became highly popular. But the doctrine of a God devoid of all plurality or corporeality remained henceforth dominant and incontestable.

This concept of God always carried with it the germ of universality. The prophets especially preached such a universalism. They proclaimed their God as the judge over all the nations in the whole earth; alien nations are instruments in God's hand for meting out punishment to Israel. The universal significance of the concepts "world" and "humanity" became much clearer during and after the Exile and Judaism was transformed from a community based upon blood into a confession. National ideals were preserved but this did not interfere with the belief in the ultimate union of all humanity, as is strikingly illustrated by the attempts to interpret certain of the Jewish religious ceremonies as symbolizing a time when all nations will be united and equal; for example, the seventy sacrifices performed on the Feast of Tabernacles were interpreted as representing the seventy nations of the globe.

Cult and rites were without significance in the religion of Moses; the Decalogue does not mention them. Fanes, altars and places of pilgrimage did not exist and the prophets radically questioned the existence of a sacrificial cult during the desert period. But in Canaan the conquerors found a widely ramified and extensive cult of fertility deities, whose favors were sought after by all kinds of gifts, magical devices, festivals and orgies. In this way pilgrimages, sacrifices and rites became popular among the Israelites and were as far as possible incorporated into the ideas of the covenant and assimilated by it. These practises gained ground rapidly. Cult

centers, particularly royal ones, acquired also political influence. The prophets fought not so much against the cultus as such as against the attempts to attach to it intrinsic value, to regard it as a fulfilment of the terms of the covenant. The polemic of the prophets, which is found also in certain psalms, was instrumental in eliminating cult centers but not in abolishing sacrifices, which remained the joy and the support of the simple man. According to the statement of Maimonides, the Torah sanctioned sacrifices and rites as a concession to the low cultural level of the people of that time.

With the destruction of the temple at Jerusalem in 586 B.C. the sacrificial cult was eliminated; the Exile allowed only for the performance of those rites which were independent of the temple; Sabbath and circumcision were regarded as signs of the covenant and their observance and practise were granted also to non-Israelites. But neither temple, priests nor sacrifices were altogether given up; only sacrifices ceased to be a matter concerning the priests alone, for the lay community demanded and obtained the right to participate in these rites and even raised the necessary expenses through a poll tax. More than this, prayer gained for itself a place of equality with sacrifice and after the Dispersion completely replaced it.

Since the days of Mosaism the idea of obligation toward one's fellow beings has been ascendant in Judaism. The system of law introduced by Moses was not the morality of the master class but of free citizens possessing equal rights. It demanded recognition of man by man. It created the ideal of "the fellow being" and of "the neighbor." This system of morality sprang from the experience of the Jew as an alien, even as a slave in Egypt, and demanded respect for human dignity. The oldest Biblical collection of laws, the *Book of the Covenant*, was undoubtedly influenced by the code of the Babylonian king Hammurabi. It greatly resembles it in systematic arrangement but towers above it in its enlightened social views. While Hammurabi, for instance, conceived law in accordance with wealth and social position, while he applied the *lex talionis* literally and allowed its brutality to fall upon the shoulders of innocent people, Israel practised the doctrine of equal rights for all and recognized the *lex talionis* only as a general principle to be sparingly applied. Post-exilic Judaism finally abolished it entirely, substituting a money fine. The prophets of Israel raised thundering accusation against injustice

and oppression of every sort. Not that social conditions among the Jews were worse than in other countries nor that Israel was ever threatened by a social revolution, but the Jewish conscience was more sensitive; social injustice weighed more heavily upon it because it was regarded as a sin against God and a denial of His covenant. The morality of the prophets has subsequently become incorporated into the morality of civilized humanity. Under its influence Israelite legislation assumed that social and charitable character which comes to light especially in *Deuteronomy*. Special attention was given to the protection and care of the propertyless and the alien (metic). God was regarded as the avenger of the poor, the father of the orphans and the friend of the metics. Since the Law wished to restrict wealth and to prevent poverty or at least to mitigate it as far as possible, the propertyless were given the right to share in the crops. Legal procedure and the administration of justice were based on principles of humanity and mildness; labor and service contracts were inspired by a highly developed social spirit. The humanization of society was developed systematically in post-Biblical Judaism. The word *tzedaka* came to designate works of charity, thus making it an obligation to aid the needy. In all Jewish communities there was established a well ordered system of poor relief, for which regular taxes were raised; and even today many Jews willingly pay the traditional tithe from their income for welfare work.

The institution of slavery was never officially abolished in Judaism. A distinction was made between a Hebrew and an alien slave. The former was permitted to sell himself for only a limited number of years. If at the expiration of his servitude he still desired to continue in his master's service he was forced to undergo the ordeal of the "boring of the ear" and to serve his master forever. Rabbinic interpretation later provided for his release in the jubilee year. The slave was taken into the family and humane treatment of him was prescribed by law. The Jewish community always made strenuous efforts to redeem a Jew who was enslaved by a non-Jew. The attitude toward pagan slaves differed little from the attitude generally prevalent in the ancient world, but mildness and considerate treatment were recommended.

The most important social laws in Judaism are those which are connected with the Sabbath ideal. Whatever the influence of the Babylonian *Sapattu* may have been upon the Sabbath insti-

tution, it was only in Israel that the idea acquired a great social importance. After six days all work must cease, even such important labor as plowing and harvesting; and not only must the master celebrate but also the slave, the metic and even the cattle must have their rest. After six years a fallow year is declared for the soil; the fields are not cultivated, the grapes are not gathered, whatever grows uncultivated belongs to the poor of the locality; debts are canceled so that poverty shall not oppress the people. After seven times seven years a jubilee year is declared for all the inhabitants of the country; in this year all the slaves become free, even those who have voluntarily entered into servitude. The soil is reapportioned and reverts to the tribe; for it is considered essentially that the land belongs to God, that men are only God's servants and metics, that they can therefore sell only the yearly produce, never the soil. The regulation concerning the jubilee and its revolutionization of property relationship was never completely carried out, but its principle proved an ever effective exhortation for a more just distribution of wealth and a means of preventing the impoverishment of the masses.

The acquisition of wealth and riches although not glorified in itself was never expressly condemned. Except as found in isolated ascetic writings the idealization of poverty as found, for example, in Francis of Assisi and the mendicant orders is absent in Jewish religious ethics. The rich were, however, enjoined to consider their wealth as a trust from God and were to use it for the relief of their fellow beings. In the matter of business relations a strict ethical code was enforced which forbade any resort to trickery and dishonesty in relations with non-Jews as well as with Jews. The Bible and the Talmud allowed the Jews in their dealings with strangers certain privileges that were forbidden them in dealings with Jews, and many Jews during the Middle Ages and modern times have doubtless practised a double code of business ethics; generally speaking, however, the mediaeval rabbis ruled that this had applied only to the old pagan peoples and explicitly emphasized the fact that it had no validity for the monotheistic peoples in whose midst the Jews of the Diaspora live. The didactic books like the *Sefer chassidim* especially emphasized the need for rigid ethical relations with non-Jews.

Interest on loans to a Jew either in kind or in money was expressly forbidden. Post-Biblical Judaism interpreted this law with extraordinary

vigor and forbade any transaction which bore even the remotest resemblance to usury. *Deuteronomy* allowed interest to be taken from the stranger (XXIII: 20); but some of the rabbis, basing their view on the verse in *Proverbs*, "He that by usury and unjust gain increaseth his substance, he shall gather it for him that will pity the poor" (XXVIII: 8), inferred that no interest is to be taken even from the alien (*Baba metzia* 70b, and *Makkoth* 24a). Moses Maimonides' assertion that the taking of interest from aliens was made obligatory by Biblical law has generally been repudiated; Maimonides himself declared that this exaction had finally been abolished by rabbinical decision. With the increased participation of the Jews in money lending and the growth of capitalism a legal fiction in the form of a contract, known as a *shetar isska*, was developed whereby the taking of interest was made possible even from a Jew. This resort to legal fictions was often utilized in later Judaism as a means of modifying the rigor of the law to meet the realities of new social and economic development.

Political theory occupies a relatively insignificant place in Jewish religious doctrine. This is perhaps accounted for by the fact that the Jews have lived almost continuously under foreign rule. In ancient Israel the monarchic form of government was at first accepted with an aversion which was a natural result of rankling memories of oppression; but the idealized conception of David surrounded royalty with a poetic halo, and the perfect state of the future came to be associated with the rule of a scion of the house of Jesse. The prophets were interested in their country only when it aimed to achieve righteousness and justice. Postexilic Jewry adjusted itself to foreign rule and lived under its laws with resignation, altogether indifferent to ruling power. The Pharisees also combated the Jewish rulers of Israel whenever they violated the laws of the Torah. The yoke of Rome, "the Kingdom of Evil," was borne with reluctance, but a *modus vivendi* was finally worked out. The compromise of Jesus, "Render to Cesar the things that are Cesar's, and to God the things that are God's," was probably chosen by the great majority of the Jews. It was only a relatively small party, that of the Zealots, which refused to recognize any other master but God, and its rebellion against Rome resulted in the loss of Jewish political independence. The Jews began to lose interest in political life and to yearn for the days of the Messiah in which God will restore the

ideal world kingdom and in which Israel will enjoy full freedom and will have the rank of *primus inter pares* among the nations. In the meantime the Jews felt that they were in Galuth (Diaspora); a Palestinian teacher of the third century maintained that God made the Jews swear that they would not revolt against the nations among whom they were destined to live and promised that the latter in their turn would not oppress them over much (*Kethuboth* 111a). With this the principle of loyalty toward the state was established, provided it did not jeopardize the integrity of the Jewish religion. The Babylonian teacher Mar Samuel coined the expression *Dina demalchutha dina*, which made the civil law of the state valid, thus enabling the Jews to submit to alien legal rule and to take the oath in alien courts with an easier conscience.

Ancient Jewish life was not devoid of a warlike spirit. Yahweh was characterized as a "man of war." The prescriptions of the Torah with regard to the extermination of the Canaanites and the story in the book of *Joshua* describing the manner in which it was carried out were extremely cruel expressions of the resentment engendered by the fact that the absorption of the Canaanitish population was slower than anticipated. The progress of religious ideas among the Jews is attested by the peaceful spirit that pervades the stories of the patriarchs and by the Deuteronomic prescriptions with regard to humanizing warfare. Despite the fact that the prophets lived in mortal dread of the Assyrian military power they proclaimed the ideal of eternal peace. The ideal ruler of the future, it was foretold, would be a prince of peace. Jewish tradition transformed King David from a warrior into a pious bard who leads his herd in the ways of God. The Talmud repudiates every war of aggression and sanctions only wars of defense. When the Hasmoneans wished to build the Jewish state on a military basis, the Pharisees opposed them with their pacifist ideal. The leaders could not prevent the people from giving free vent to their passions in bloody revolts, but the latter persistently clung to the Messianic ideal and regarded their struggle against Rome as the birth throes of a better and more ideal day. The destruction of their political independence robbed the Jews of all military ambitions; the state laws even excluded them from military service. World peace was and still is one of the most fervent of the Messianic hopes of Judaism.

The family in Judaism is considered as the corner stone of Jewish communal life. Its pur-

pose is not only to propagate but also to promote moral adhesion between its component members. Marriage is ordained by God; therefore woman, who like man was created in His image, was allotted her place in this world in order that she might be "a helpmeet for him." Polygamy was permitted, although monogamy was in very early times the customary form of marriage. For western Jewry the principle of monogamy was established by a ruling of Gershom ben Jehuda in Mainz (c. 1000) and since then has had the force of a law. Although divorce is allowed it is looked upon with disapproval in some circles and in general is regarded as a painful experience. About the time Christianity arose the prevailing conception was that divorce was forbidden by divine law—a belief which has been preserved by the Roman Catholic church down to our own time. The Pharisees, on the contrary, sanctioned divorce; there was difference of opinion among them with regard merely to the conditions under which it was justified. According to Biblical law a woman was powerless to prevent her husband from divorcing her; but the Talmud and later the mediaeval rabbis insisted that some consideration be given to the woman's wishes. The legal status of woman in Jewish law is far below that of man; as, for instance, in her right to inherit and to bring suit at court. Even her domestic duties are prescribed. Despite all these disqualifications woman was never regarded as merely the property of man and as completely without rights, as were Babylonian, Greek and Roman women. In this respect social customs under the quiet influence of religion were far more advanced than the codified laws. In the course of ages they have assigned to woman a high social plane, which she still maintains in the Jewish family. The close intimacy of Jewish family life has always and everywhere been recognized as a special characteristic of Judaism.

Learning and education were particularly emphasized in Judaism; throughout Jewish history learning has in fact been the most admired of accomplishments. The Pentateuch enjoins all parents to give religious instruction to their children; and in post-Biblical Judaism the unique attempt was made to educate the whole people in its religion through the institutions of the synagogue and the school, or *beth ha-midrash*, which usually existed in connection with it. This emphasis on learning, which is responsible for the overdeveloped intellectuality of the Jew, resulted from time to time in the creation of a

social cleavage between the intellectual aristocracy and the more uncultivated masses. In Talmudic times a division appeared between the learned and the "people of the land" (*am ha-aretz*), whose strict observance of the Law was questioned and who as a result were not trusted as witnesses and with whom intermarriage was discouraged. This overemphasis upon learning served also to provoke reaction in the form of mystical movements, which had a greater appeal to the masses, and was likewise one of the prime factors in the rise of Chassidism.

The practise of the Jewish religion has had considerable influence upon the characteristics of the Jews, their social behavior and their social and economic status. The observance of the numerous regulations imposed on the Jew by his faith has led to a strong disciplining of the will as well as to a marked practical rationalization of life. Above all it has given the Jew a feeling of otherness, a feeling that he is a stranger. Observances such as the dietary laws have prevented him from accepting alien hospitality; his Sabbath and festivals with all their attendant rites have marked him off from the surrounding world. This feeling of otherness was further strengthened by the Jewish belief in the doctrine of the election of Israel; even as early as the Hellenistic period in Alexandria enemies of the Jews continually attacked them for their exclusiveness. On the other hand, the belief that they are a chosen people has contributed greatly to the continued survival of Judaism despite all persecution and hostility.

There has been much theorizing as to the effect of Judaism on the rise of capitalism and the capitalist spirit. The most impressive attempt of this kind is Sombart's *Die Juden und das Wirtschaftsleben* (Leipsic 1911, tr. by M. Epstein, London 1913). Sombart finds the spirit of Judaism identical with the spirit of capitalism. Judaism for him is characterized by "the preponderance of religious interests, the idea of divine rewards and punishments, asceticism *within* the world, the close relationship between religion and business, the arithmetical conception of sin, and above all the rationalization of life." These characteristics, he claims, have developed in the Jews those traits which have made them one of the chief factors in the rise of modern capitalism. In the light of careful study of the sources this view is completely one-sided and exaggerated. Only this can be proved: the traditional mode of life of the Jews enabled them to participate in capitalistic activities and their

religion did not hinder them from exploiting these opportunities, notwithstanding the fact that the spirit of both the Old and the New Testament is diametrically opposed to the spirit of capitalism. It is not Judaism but the individual Jew who has contributed to the development of the modern economic system, aided as he has been by external and purely historic forces and circumstances. Max Weber also traces the participation of the Jews in trade and money lending to the influence of their religion. According to him the practise of rabbinic Judaism with all its ritual precluded the possibility of engaging in agriculture. His religious duties made it necessary for the Jew to live in a city close to other Jews and to Jewish institutions and thus he came to engage in trade. Moreover the emphasis placed on learning led many Jews to money lending as the occupation which could provide them with the greatest amount of leisure for study of the law. Weber failed to see, however, that similar conditions in Palestine and Babylonia did not prevent Jews from engaging in agriculture.

The modern period which brought about Jewish emancipation caused a serious crisis in Judaism, from which it has not yet emerged. The existence of the Jewish traditional mode of life was threatened from three separate quarters. The greatest menace issued from the changes in economic and social conditions. Mercantilism and early capitalism opened new fields to the Jewish enterprising spirit. The newly risen middle class, which began to play an important part in all countries, was inspired by the ideals of the Enlightenment and emancipating itself from traditional religion welcomed into its ranks the intelligent, enterprising and practical Jews. For two centuries Judaism had been dominated by a gloomy philosophy in which this world was regarded as a vale of tears; it was weighted down with the yearning for redemption in the world to come. Now the Jews began to take a deeper interest in their earthly existence. They wished to compensate themselves fully for all the deprivations they had suffered in the course of the centuries. They were ready even to renounce their belief in eternal salvation and to discontinue their observance of the dietary laws and the Sabbath in favor of worldly well being. In this way the traditional mode of life that had existed for ages was destroyed.

The second danger was of an intellectual nature. Moses Mendelssohn's philosophy of enlightenment completely rationalized and lev-

eled Judaism by identifying it with natural religion. It was "revealed law" instead of revealed religion which now became the center of Judaism. Therefore the followers of Mendelssohn regarded Judaism as nothing but a mass of wretched, mechanical restrictions which perpetuated the segregation of the Jews, a situation which they very much resented. They believed that piety and religion were not essential to Judaism; and when Schleiermacher, for whom they had great admiration, declared that the basis of religions was what he called *das Religiöse*, they were hard put to find this basis in their own faith because it was buried under the crushing weight of a rigorous formalism. Thus it came about that dogmatic Judaism, which for thousands of years had been preserved intact, became subject to violent criticism. The leaders of rabbinic Judaism were incapable of facing the new problems intelligently. Instead they insisted upon an even stricter observance of tradition, ignoring the fact that Chassidism in its initial stages was a movement concerned with the inner liberation of the Jews.

The political situation also appeared as a source of danger. Napoleon was confronted by the problem whether it was possible for him to compromise with Judaism in the same way as with the Christian churches; in other words, whether the Jews were to be tolerated as a religious group or whether they were to be suppressed as a national unit. The solution which he himself offered was that the Jews were to eliminate all national elements in their tradition and retain only their religious ideals. The Great Sanhedrin gladly accepted this solution, which acquired authoritative force in the subsequent struggle for emancipation. The unity of Judaism, which had persisted despite the Dispersion, was disrupted by a political power and the Jews now came to be differentiated according to the countries in which they lived. For the first time the absence of a common religious authority began to be felt; and the Hebrew language, which up to that time had served as a cultural and religious bond between Jews, made way for the languages of their adopted countries.

It was under the influence of these conditions that Reform Judaism arose in Germany. The early reformers were concerned with making Judaism more "presentable" to western civilization. Impelled by the desire for political emancipation and the fear lest their patriotic sentiments for the land in which they were residing be questioned, they tried to make Judaism as

similar as possible to the religion of their neighbors. The first attempts to cope with the situation were inspired by Protestantism and were confined exclusively to the aesthetic transformation of the synagogue service. More decorum was introduced, the organ was brought in, German prayers and a German sermon were added. Later the prayers concerning the national and political aspirations of the Jews were excluded from the Reform prayer book.

The theoretical basis for Reform Judaism was supplied chiefly by the writings of Holdheim and Geiger. A great impetus to modernization was furnished also by the romantic movement, which discovered the concept of "historical Judaism," and by the new "science of Judaism" founded by Leopold Zunz. Zunz began to study Judaism systematically and in the spirit of critical science. He succeeded in vitalizing its spirit, in giving greater significance to its institutions, in establishing the validity of its doctrines and in lending greater importance to its educational system. Jewish theology, nourished by the spirit of idealism, burst into new flower in this fertile soil. Laying special emphasis upon the prophetic conception of the unity of the human race and upon the Messianic ideal it therefore demanded, besides the purity of faith, religious sentiment and the permeation not only of the ceremonial but of all Jewish life with warmth and inner content. Geiger emphasized also the historic character and the relativity of religious phenomena. He insisted upon a historical approach to religion and upon a return to the prophetic purity of idea and form. He conceived of the Dispersion of the Jews as a means of fulfilling their Messianic mission and of their emancipation as a progressive step in that direction. The Reform movement spread to other countries of western Europe and to the United States, where it was propagated by Isaac Mayer Wise. The extreme element of Reform Judaism has scrapped the entire Jewish ritual—not merely its religious mystical elements. In a few instances the practise of exchanging pulpits between Christian and Jewish ministers has been introduced and perhaps the only difference between them is that concerning the attitude toward Jesus. On the other hand, other elements of Reform Judaism have under the stimulus of the Jewish national movement acquired a much more national orientation than that of the early reformers.

During the early days of the reform movement Jewish orthodoxy in Germany found its leader in Samson Raphael Hirsch. Hirsch contrasted

revealed Judaism with the spirit of the times and looked upon the Diaspora as a school of purification established by God and upon the Jew as the bearer of the mission to regain his relationship with God through the fulfilment of the prescribed duties. Conservative Judaism has developed under the leadership of men like Hildesheimer in Berlin and Solomon Schechter in New York; its aim is to modernize the Jewish religion and at the same time to preserve its traditional character in all the essentials. The great mass of eastern European Jews still adhere to strict orthodoxy although here too the revolt against tradition made itself felt in the *haskalah* (enlightenment) movement, especially during the post-war period with its complete disruption of Jewish political and economic life. The most militant elements of orthodoxy have united in the Agudath Israel, which aims to perpetuate the rigorous regulation of Jewish life by rabbinic Judaism. It combines the orthodox elements of eastern Europe, especially the important Chassidic rabbis, the political orthodoxy of Hungary and Germany and the western European orthodoxy of the school of Samson Raphael Hirsch.

Under the influence of neoromanticism at the end of the nineteenth century a religious revival took place. The Reform movement grew more vigorous, and thinkers like Herman Cohen and Martin Buber gave a deeper meaning to the conception of God, communal ideals and Messianism. Simultaneously a great upheaval took place among the Jews in the east. A large number emigrated to America and brought along with them their religious ideals, which in turn influenced Jewish life in the old countries, now drawn into the general non-Jewish movements. The Jewish masses with their national attitudes, intense experiences and sentiments and their dreams and hopes nourished by Chassidism became a decisive factor in Judaism, and their views and customs gained a foothold in the communities of the west. The national character of the Jewish religion and ethics was emphasized by such thinkers as Peretz Smolenskin and Ahad Ha-am. World Jewry, which had been divided by differences of religious opinion and national cultural affiliations, was once more furnished by nationalism with a common platform. Zionists propagandized their views in all camps. The revival of the Hebrew language became a part of its program; new Hebrew and Yiddish literatures sprang to life. New literary, historical and religious values were created which established a bridge between the lives of eastern and western

Jewry. At first the Jews of the west repudiated these values, but their own increasing decadence and the growing influence of east European Jews helped to revive Judaism in the west.

With the increasing participation of the Jews in the political, social, economic and cultural life of the countries of their adoption Judaism no longer completely dominated their entire life but constituted only one of their interests. Furthermore industrialization and antisemitism have driven the Jews to the large cities, where they are exposed to the pressure of intellectual and cultural assimilation. Where they live in small groups they are constantly decimated through mixed marriages and conversions. The following of the orthodox ritual has become increasingly difficult with modern economic conditions. The observance of the Sabbath prevents a Jew from receiving employment in most government offices and with other Christian employers. Economic disadvantages are also incurred by the Jewish shopkeeper who is forced to observe both Saturday and Sunday. The observance of the dietary laws results in an increase in living costs, and the desire to transmit traditional Judaism to the young generation results in both economic and spiritual complications. It is perhaps due to these factors that except in eastern Europe Judaism has retained its strongest hold on the upper and middle classes and has relatively little influence on the mass of Jewish workers.

The historic significance of Judaism is very apparent. Through Christianity and Mohammedanism it has become one of the most important factors in western civilization. Its "ethics," says Max Weber, "still largely forms our present European and Near Eastern religious ethics" (*Gesammelte Aufsätze zur Religionssoziologie*, vol. iii, p. 6). The Christian church, according to Harnack, was largely able to carry on its work because the soil was prepared for it by Judaism. At the birth of Christianity there were religious communities to be found in the large cities. Knowledge of the Old Testament was widely disseminated, and it was quite easy for the Christian church to adapt for its purposes the existing Jewish catechisms and liturgies. The people had already been accustomed to the religious service and to the regulation of their private lives. Christianity inherited from Judaism an impressive apologetic for monotheism, historical teleology, including the day of judgment, as well as a system of ethics which involved the obligation of individual propaganda. Christian ethics is also based upon the Jewish. St. Paul of course

wages war upon the Law, but what he opposed was only the ceremonial law. He accepted the moral law of Judaism and this gave the church the opportunity to transform its original hostile attitude toward this world into an affirmation of the social and political life. In the body of Jewish tradition Christianity found the pattern for a well integrated national life which could serve as a guide to all the complicated problems offered by political, social and economic activities.

Judaism advanced the idea of a legal order that was established by God and of a governmental power designed to issue laws and to punish their transgression. It provided Christianity with the weekly festival and rest day, notwithstanding the many controversies called forth in the church by the character of the Sunday celebration. Easter and Pentecost also were derived from Judaism, even though both were given a Christian reinterpretation. From the synagogue Christianity borrowed not only the idea of a spiritualized religious service but also a great deal of material for its ceremonial rites and liturgy; above all, the institution of recitation and the expounding of the Scriptures. The Christian communities were fashioned after Jewish models and maintained the same welfare organizations. The word *alm*s itself originated in the Greek translation of the Bible. The church tithe is but a continuation of that of Biblical times.

Most important of all was the Christian acceptance of the Jewish Bible. "Had it not accepted the Old Testament," says Weber, "there would have arisen on the soil of Hellenism pneumatic sects, mystery cult societies, and the worship of Kyrios Christos, but there never would have been a Christian Church and a Christian daily ethics, as there would have been no basis for their existence." It was the Old Testament which proclaimed the God of creation and of the covenant and became the foundation and the confirmation of the New Testament. This is evident from the fact that since the days of Marcion the church has repudiated all attempts to separate the New Testament from the Old.

The fact that the Jews preserved the Old Testament in its original text and studied it continually had a certain influence on all phases of Christianity. Christians were able to apply to their Jewish neighbors for solutions of difficulties in dogma, and from this it can readily be seen that the church was not wrong in accusing the Jews of playing into the hands of the her-

etics. The great period of Biblical influence came with the Reformation, which not only preached a repudiation of dogma in favor of Scripture and made of the Bible a popular book but also had it translated directly from the Hebrew with the assistance of Jewish commentators.

The Biblical idea of a "general priesthood," or of a people of priests, required vindication in the daily life of the individual, and so beside the Sermon on the Mount the Decalogue acquired equal importance in the eyes of the Christian, inasmuch as it contained the principle of divine and brotherly love. The Old Testament became the final court of appeal concerning questions of right, customs, family and professional life. Moreover its acceptance of this world had a determining influence on the new concepts of the state and society. The constitutional history of Israel was the inspiration for political philosophers of all schools until the eighteenth century. Calvinism also brought back into Protestantism the glorification of worldly activity, an ideal which hitherto had been absent because of the influence of Pauline doctrines. This sentiment found its highest expression in the Bibliolatry of Puritanism, which wished to identify itself with the spirit of the Bible but was forced by the sad experiences of religious persecutions and civil war to pay attention to only one aspect of Biblical piety. Thus the Puritan concept of God took on an austere severe character, something which had long been discarded by Judaism and Christianity. Once more the god of war who punishes and persecutes ruthlessly, who orders the annihilation of one's enemies without mercy, became an ideal. The Puritans regarded themselves as instruments of God's will and therefore thought it their duty to assert themselves in life. They took over to a great extent the laws of the Old Testament and also surrounded the Sabbath with a new legalism which was as stringent as that of the Talmud.

Mohammedanism like Christianity branches from Judaism. The Arabs became acquainted with Jewish doctrines not only directly but also indirectly in Christian form, and it is difficult to demarcate exactly the two spheres of influence. Mohammed proclaimed to pagan Arabdom the most rigid monotheism in all its old Biblical austerity. He based his ethics upon the Decalogue and from Judaism he borrowed the regulations with regard to what is clean and unclean and the prohibition of foods, excoriating

transgression as a heinous crime. The Jewish custom of praying he also assimilated into Islam. The mosque is patterned after the synagogue. The Mohammedan weekly day of rest is devoted to prayer, recitation and sermons, although work is not prohibited on that day. Mohammed, however, did not adopt the Bible for Islam. He regarded himself as the "seal of prophecy" and proclaimed the Koran as the confirmation and the divine substitute for the Jewish Scriptures. Nevertheless, his attachment to the past is indicative of a detailed knowledge of post-Biblical Jewish lore, for the Sunna, which is regarded as a source of authority beside the Koran, corresponds to the role of tradition in Judaism.

ISMAR ELBOGEN

See: LAW, section on JEWISH LAW; CHASSIDISM; MESSIANISM; DIASPORA; GHETTO; ANTISEMITISM; JEWISH EMANCIPATION; JEWISH AUTONOMY; ZIONISM; RELIGION; SACRED BOOKS; PRIESTHOOD; THEOCRACY; CHRISTIANITY; ISLAM.

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LABOR MOVEMENT is the term which is used to designate all of the organized activity of wage earners to better their own conditions either immediately or in the more or less distant future. In all countries it has run along three lines—political, economic and cooperative. These have not been parallel but have alternated in predominance in the same country or have predominated differently in different countries according to differences in institutions and economic conditions.

Essentially the labor movement implies the existence of a wage earning group, but it does not appear until that group develops some consciousness of the separateness of its interests as opposed to those of its employers and until it realizes the necessity for some form of organization in order to advance these interests. Its earliest time limit must be sought in the period of capitalism, when the free wage earner replaced the bound serf of feudalism. The labor movement is always a reaction and a protest against capitalism.

But capitalism is not a single or static concept. It is an evolutionary concept of three historic stages—merchant capitalism, employer capitalism and banker capitalism. The first arose out of the extension of markets and the second

out of technology; the last is now dominant as a result of the prevalence of the credit system. Labor movements reflect these capitalistic movements.

Different industries move at different rates of speed toward final consummation. In the merchant capitalist stage the wholesaler aided by the rising commercial banker dominates the access to distant consumers, while the producers are scattered in small shops of masters, mechanics, apprentices and helpers. The employer here is himself a mechanic contracting to deliver the finished product to the merchant capitalist, who owns the raw material, while the contractor owns the shop and the journeyman the tools. This is the sweatshop system of production, because the merchant capitalist sets the contractors to competing with each other and with homework, prison work and foreign producers, so that their profit as employers comes mainly from the "sweat" of the workers. The building trades are the typical lag from this stage of capitalism; in the case of agriculture this stage survives in the middleman system.

In this merchant capitalist stage arises the revolutionary philosophy of Proudhon's anarchism for industry and cooperative marketing for agriculture. If a social philosophy means a certain view of human nature and a goal toward which a movement is directed, then the philosophy of anarchism is that of individual property of small producers with voluntary cooperation to displace the middleman as the goal. The anarchist philosophy does not abolish private property—it proposes to make it universal for each individual, conforming to a stage of industry where the contractor owns the shop and the peasant the farm. The small proprietor who works with his men is idealized as a competent business man who could succeed in bargaining cooperatively if the great middlemen and their banking affiliates did not have monopolistic power granted by governments. This is indeed the philosophy of the small capitalist, the *petite bourgeoisie*; and it is not surprising that after a similar revolutionary movement of wage earners has arisen under the name of syndicalism the petty capitalists of this stage, unable to combine cooperatively, should combine politically under the banner of Fascism to dominate the big capitalists and bankers on the one side and the revolutionary wage earners on the other.

It is in this stage of merchant capitalism that trade unionism also emerges. The trade union is originally a union of the journeymen or

skilled mechanics working in the small competing shops of the petty employer. They eventually abandon cooperation and the other ideals of anarchism and devote their energies to strengthening their bargaining power. At first the unions are confused about the economic position of this petty employer who works along with them and is today a journeyman, tomorrow a contractor and employer. They admit him to membership because his economic interest is that of a wage earner; then they exclude him because his interest is with the capitalists, for whose profit he hires the wage earners. This is the stage of craft unionism which excludes helpers and unskilled workers and endeavors to control apprenticeship and maintain the "union shop" or "closed shop" for the sake of increased bargaining power. The philosophy is that of the skilled mechanic, who has "invested" years of low wage apprenticeship for the sake of an established position and a higher standard of life and yet sees himself unemployed and brought down to the level of the lowest by their competition. It is the stage of trade unionism which began in 1850 in England and the United States and of the Hirsch-Duncker unions organized in Germany twenty years later.

When the employer becomes the capitalist by owning the machinery and factory as well as the goodwill which formerly belonged to the merchant, when the contractor moves into the factory and becomes the foreman, when the skilled mechanic by specialization and machinery is reduced toward the level of the unskilled, then capitalism becomes employer capitalism and laborism tends to become communism, syndicalism, guild socialism or industrial unionism. Karl Marx saw this stage in England after the middle of the nineteenth century and predicted it for the world—the technological stage of capitalism on a wide scale, made possible by the preceding extension of markets under merchant capitalism. This is the stage of the organization of the unskilled beginning in the 1880's with the Knights of Labor in the United States and with the dock workers, gas workers and general laborers in England.

The wage earners as such cannot wait upon a reorganization of society or upon political action for jobs and food. If the reorganization comes suddenly, under the leadership of a Lenin in the midst of world war, they may fall in line, even though the ripened employer capitalism for which Marx would have had them wait has not yet appeared. Their strikes are at first

blind protests; and, although they are thereby unemployed, it is an unemployment concentrated by their own will and not staggered through the years at the will of their employers. Then if successful they acquire "business" leaders, who by placing the agitational leaders in subordinate position negotiate with the employers for the best terms obtainable under the existing institutions of property and liberty. This is the collective bargaining and trade agreement stage of unionism.

Whether the unions turn out to be craft or industrial depends on the capitalistic stage of the industry and the class solidarity of the workers. If they are divided by language, religion, politics, skill, color, race or geographical sections, as in the United States, there must be built up an artificial solidarity, which reaches only the few who can lift themselves above the mass into craft unions. If they are driven together by a history of common subjection to a military, aristocratic, ecclesiastical or proprietary lordship, as in continental Europe, they fall into the widespread solidarity of class struggle and a powerful socialist political party. But if this solidarity is the result of the advance of the employer capitalist, then they vacillate between industrial unionism and socialist parties.

Thus the two goals which divide labor movements are displacement of capitalism and bargaining with capitalism. Displacement takes the form of voluntary cooperation primarily through producers' cooperatives (although consumers' cooperatives also had this aim at first) or the compulsory form of politics, communism or syndicalism. Bargaining with capitalism is unionism. But these goals are not inseparable. They follow a time schedule. In periods of rising prices, of increasing profits and growing demand for labor bargaining with capitalism predominates, because employers can afford to pay and unemployment has no terrors. Revolutionary political activity and socialist utopias are abandoned for the immediate and real gains achieved by union organization. Such political demands as are made deal with the interference with labor's freedom to organize and act on the economic field. In periods of falling prices, of decreasing profits and unemployment the displacement of capitalism predominates as the goal, because capitalism cannot furnish employment and its burdens are actually relieved by unemployment. Political activity, communist agitation and quasi-revolutionary strikes replace

the "business" strikes of unionism. Socialist and communist parties poll large votes and plans for a reorganization of society on a non-profit basis receive serious consideration by unemployed and partly employed workers as well as by radical intellectuals and others.

The period of banker capitalism is the modern variation of Karl Marx' theory of the ultimate concentration of all industry. During the nineteenth century the commercial banker with his short term credits was typical. During the twentieth century the banking syndicates or the investment bankers have risen to a dominant position in the consolidation of industries, the sale of securities and control of boards of directors whose corporate securities they have sold and for which they have become substantially responsible. Millions of scattered investors now automatically organize themselves by transferring their savings to securities floated by trusted bankers.

Labor movements now face a new problem and take on a puzzling new formation. No longer are they dealing with the master workman or the small contractor or even with their own factory managers; they are confronted with an invisible army of investors and speculators led by an invisible syndicate of bankers. Through international affiliations the syndicates are world bankers. A nation, a section of a nation, a restless locality, a labor government, a labor party or a labor union which jeopardizes the credit of its immediate employer thereby shuts down the latter's establishment and transfers employment to other nations, other sections, other employers. In the face of this situation of the twentieth century all labor movements except in Russia seem to be helpless and their leaders despondent. Perhaps returning prosperity will change the situation and reestablish a militant unionism seeking to restore the rights taken from it during the depression, or it may be that labor movements will be relegated to the history which now shrouds the guilds of the Middle Ages or that craft unionism will turn to industrial unionism or communism. Yet many enduring effects remain. Labor movements make a new class alignment unknown to history. Before the industrial revolution it was inconceivable that an unpropertied class could have a permanent interest in the commonwealth. Now, whether it be explained by a higher ethics or merely by the incoming of machine technology, this proletariat by strikes, revolutions or dangerous unrest forces its way into fuller citizenship.

Contrary to previous assumptions the free worker has been found to be individually more efficient than the servile worker. This efficiency, however, is acquired at the cost of unemployment. In the small industry or agriculture of the merchant capitalist stage the worker could obtain at least food, heat and shelter when unemployed. But in the banker capitalist stage the culmination is reached of a huge urban and factory population unprovided with even these minimum necessities of life except through the money wages which stop when unemployment sets in. The political and economic menace of an unpropertied population removed from the soil yet enfranchised grows with the development of the factory system and long distance transportation. In general the degree to which the older institutions of property, liberty and representative government are menaced correlates with the extent to which a non-propertied class has displaced the propertied classes in politics.

The cycles of overemployment and unemployment have doubtless been the main cause of the characteristic movements of this non-propertied class. Marx' prediction of the decay of capitalism rested mainly on the use made of the "reserve army of the unemployed"; and the authorities of Soviet Russia boast that by overthrowing capitalism they have eliminated unemployment, although they admittedly have low wages. But the unemployment which Marx had in mind was the chronic unemployment of displacement by improving technology, whereas the cyclical unemployment which alternates full employment with unemployment is much more serious. In prosperous times and in periods of inflation, when prices are rising and profits augmenting, the employers compete for labor and they readily raise wages far above the hopes previously entertained by the workers. In the deflation period, when profits begin to disappear, the daily rates of wages are not immediately reduced but the laborers are laid off.

This cyclical variation from prosperity to depression has a profound effect upon the psychology of laborers. In the period of full employment there is no pressure upon them to exert themselves, because they can quickly get other jobs at higher wages if they are discharged. They are careless of machinery, they abandon their trucks on the streets, they are insubordinate. But in the period of unemployment hunger drives them to speeding up, to longer hours per day, to lower wages per hour, to submission.

They are first demoralized, then pauperized, then coerced.

Trade union policy follows this cyclical experience, while Marxian socialist policy more nearly follows technological unemployment. In a period of returning prosperity the unemployed are first taken on without a raise in wages; they must work longer hours and at higher speed. Then, as full employment approaches, it becomes easy to organize; the first demands are for shorter hours and, as the cost of living rises, for higher wages per hour. This is the typical although not the universal procedure. In 1897 at the close of the long period of unemployment the membership of all American unions was only 447,000. By 1900 with returning prosperity the membership had risen to 868,500. In 1920 with the post-war prosperity the membership rose to 5,110,800. The unemployment of 1930 and 1931 reduced it to about 3,000,000. Similar changes have occurred in other countries.

Yet like communism trade union policy is based on the philosophy that there is "not enough work to go round." Although opponents charge that they aim to restrict output, many union policies are really designed to ration among the members the limited amount of work. Most restrictive working rules look toward the elimination of job scarcity and the creation of greater job opportunity and security of tenure. Thus the closed shop is a prime necessity where the union is in danger of being undermined by the presence of non-unionists. The number of apprentices is limited in order to limit the present and future number who must share jobs. The railroad unions concentrate on strict seniority rules which in time of prosperity insure to the union men an equal chance of promotion and in time of depression give the older unionists a chance to preempt jobs of lower rank before losing their work entirely. The eight-hour day and the forty-hour week are advocated, whether by legislative or union action, not only on the ground of fatigue and leisure but mainly to share the work with the unemployed. Labor movements concentrate attention on the rate of wages per hour rather than on the earnings per year, because they cannot see steady employment ahead. During the second and third decades of the twentieth century they begin to demand unemployment insurance despite the evident fact, which they recognize, that full wages for employment are better in every way than part wages while unemployed. It matters not whether the avowed goal is displacement of

capitalism or bargaining with capitalism—all agree on a policy substantially based on the experience and fear of unemployment.

These policies go further. In view of the uncertainty of employment the older virtues of thrift, on which Smith's capitalism was built, lose their appeal and give way to the demand for a higher standard of living in the immediate present. While the peasant or farmer or small business man denies himself present enjoyments to accumulate for "a rainy day" or for old age or children, hoping to retire from business in comfort, the so-called high standard of life of the bulk of wage earners is present enjoyment of everything available, including present education of their children, by means of high wages for current work. The working man who saves and then sees his savings lost or his home foreclosed becomes a butt of ridicule for the others who enjoyed their wages while they lasted and are still as well off as the thrifty when wages stop. The philosophy of labor movements becomes the immediate present, for tomorrow is beyond the worker's control.

This explains somewhat the changes of leadership in labor movements and their fleeting affiliations with the disappearing peasants and farmers. What mortgages are to the latter, unemployment is to the former. The mortgages in periods of depression precipitate the farmers into the proletariat of tenancy or wages; then unemployment masses them into wage or class consciousness. In the earlier stages of labor movements and in periods of business depression there is a loose affinity between laborers and small farmers. Each has the merchant capitalist to deal with or in the more feudal countries the affiliated landlords and capitalists. The issue then is between the rich and the poor or aristocracy versus democracy, where later it becomes the issue of wages against rent, interest and profit. In this earlier stage the so-called intellectuals, or intelligentsia, are the natural leaders, for they have a formulated social philosophy and an ability to articulate what the others feel but cannot tell. This is the stage of Marx, Lassalle, Lenin, Powderly, Louis Blanc or Proudhon. Their counterparts survive and come forward in periods of depression, when workers and farmers are desperate, and they retire when aggressive organization, routine and a chance of success call forth leaders from the rank and file, like a Gompers, an Applegarth, a Legien, a Jouhaux.

It is often represented as unfortunate that

labor movements reject these intellectuals, for they need the broader social viewpoint and the scientific mind of the intellectual. But this is a confusion of the leader with the expert. As a leader the intellectual looks to the distant future of a reorganized society. But the wage earner is deeply concerned with his job now. If the intellectual takes his proper place, as he does in all business organizations, not as a leader in forming policies but as a technician in details and an adviser against mistakes, labor organizations begin to use him. This seems to be the case in all ripened labor movements. And the expert is increasingly needed as the new world wide strength of banker capitalism threatens labor movements which have been organized along the older lines of action.

The intellectual has been employed by the labor movement especially in those of its auxiliaries which supplement and implement the political, economic and cooperative activity. Such, for example, is the labor press, manned to a considerable extent by intellectuals who, as in England, have become attached to the movement from the outside or who, as in America, have largely risen out of the ranks of organized labor itself. Another auxiliary activity in which greater reliance has necessarily been placed upon the "outside" intellectual is that of workers' education (*q.v.*). But even here there are strong groups, as in the National Council of Labour Colleges in England, which oppose the use of university trained intellectuals to teach workers' classes; even the English Workers' Educational Association pays lip service at least to the ideal of developing out of the workers' classes themselves a competent body of teachers for these classes. Another growing use of the university trained intellectual is in the research bureaus which are connected with the important central organizations in the larger countries and with some of the more important individual unions.

It must be noted, however, that the intellectual as a "worker by brain" may be forced to join the trade union movement to seek the security he can find nowhere else. Thus in France the greatest increase in unionization since the World War is among public employees, and in the United States the only important gains in membership in 1931 were among federal employees. Unemployment among the professional and white collar workers brings them closer to a realistic view of the labor movement.

There is especially one kind of appeal, the

nationalistic, wherein the intellectual and the rank and file leadership come clearly into conflict. The intellectual is likely to be a cosmopolitan, a pacifist, who sees the working men of other countries subjected to similar capitalists, but the rank and file are dependent on their own employers for jobs more than on the solidarity of the workers of the world. It may be and doubtless will be more oppressive for them if a foreign nation conquers both them and their employers than it will be if they reach an understanding with their employers jointly to fight the foreigner. In Germany the rank and file leadership in the face of a Marxian world philosophy accepted the nationalistic appeal and brought many of the intellectuals with them. The heavy burden placed upon German industry after the war showed that they were right.

In other countries a similar appeal can for similar reasons be relied upon to draw or coerce the wage earners away from their labor movements into collaboration with their employers. In capitalistic nations as in aboriginal tribes the whole population is at war. Warfare is not an aristocratic profession of a military class suppressing the workers at home and whole populations abroad; it is the people in arms. These become mainly wage earners, producing munitions in the rear and carrying them forward to the front and manipulating modern war machines. A new problem is presented of creating loyalty among those who have little or no property to defend, with the result that in the crisis of foreign war the labor movement is more powerful in its wage bargaining than in time of peace.

Yet national wars accentuate a new division, which has its prior economic foundation in the expansion of capitalistic industry: the separation of manual workers from technical, office, professional, educated and social workers. Large scale industry and merchandising push the latter miscellaneous class into a new alignment making these groups more or less conscious of their common interest. They take the place in the social organization formerly occupied by small independent proprietors, and with the remnants of the latter they form that third minority group which appears under different names and affiliations in different countries as progressives, liberals, Fascists, nationalists or war veterans. Instinctively separated from the manual workers yet not quite identified with their same capitalistic employers, their

growing class consciousness and sense of strategic position make them more or less able to turn the scale between capitalism and laborism. The strength of this group in the ripening stages of capitalism cannot be measured by inadequate occupational statistics, for although they are evidently a minority yet under capable leadership they are able to command concessions or to dominate situations.

Somewhat similar to the nationalistic is the religious or ethical appeal, which deters wage earners or softens their aggressive labor movements. The Catholic church in closer contact with manual workers and backed by the papal encyclicals, which have taken over the doctrines of the earlier Christian socialism, has devoted itself with varying success to this cause. The Protestant churches, by historic tradition the inspiration of individualistic capitalism, have not been able to appeal to the new class of wage earners; while the Russian Orthodox church, long since the acknowledged instrument of czarism, has apparently lost its hold in the face of a revolutionary materialism. Even the Catholic unions of Germany have begun to make common cause with the socialistic unions.

It is difficult to give due weight to the ethical motives which have descended from the religious training of the past. Perhaps it should be said that the ethical appeal is becoming an economic appeal and takes such form as "business ethics," "trade union ethics," "communist ethics," which confessedly spring from economic conflicts with the rise of various forms of concerted action designed to bring under control the individual behavior deemed contrary to a common interest. While the earlier guilds and unions had their patron saints, these modern associations make similar ethical rules unsanctified by religion.

To counteract the improvidence of an unpropertied class many devices for thrift and savings have been instituted. It is evident, however, that wage earners as such only meagerly or temporarily participate in them. The patrons of savings banks in the United States derive their incomes largely from sources other than wages. Cooperative home ownership, known in the United States as building and loan associations, is an effort to obtain what for the wage earner is the dubious advantage of tying himself bodily to a precarious investment, when mobility is of more substantial advantage in obtaining employment and higher wages.

Distressed by this mobility and improvidence

employers attempt with scant success and to a limited extent to set up schemes of profit sharing, stock ownership, home ownership, garden cities, credit unions—a sort of compulsory thrift because preference is given to those employees who participate. In the beginnings of unemployment insurance agitation this compulsory thrift was imposed upon wage earners by legislation, requiring them to contribute to funds when employed in order to provide part wages when unemployed. Most of these schemes turn out to be inadequate and even productive of class feeling when the wage earners reach a substantial proportion of the population. It is indeed somewhat of a mockery for propertied classes to endeavor to impose on the unpropertied and potentially unemployed the older ideas of thrift carried over from the infancy of capitalism.

England was the first nation to embark on that great process of economic change which brought about modern capitalism, and its labor movement was the first to have a gradually growing but distinct working class viewpoint. The coming of industrialism resulted at first in various movements of protest, which expressed themselves in such ways as the machine breaking of the Luddite rioters and in demands for land reform, so that this working class, essentially rural in origin, might have an opportunity to return to the land and to escape from the evils of industrialism. The collapse of the Chartist agitation in 1848 marked a new period in the English labor movement, in which industrialism became accepted as an established fact; the workers no longer looked to some ultimate escape from the factory system but sought merely to ameliorate their position in that system. Aided by a period of prosperity, which came to be known as the "golden age of English capitalism," trade union organization developed after 1850, following the so-called new model introduced into the building trades, and spread to other fields through the activity and influence of an important group of trade union leaders known as The Junta. The new model unionism was a craft unionism which believed in more thorough centralization in union organization and greater cooperation with the employers and disavowed any rashly militant strike policy. With prosperity and better tactics it flourished until the depression in the late 1870's, which revealed the limitations of a type of unionism restricted to skilled workers.

The late 1880's therefore saw a development

of large industrial unions of unskilled workers among the miners, dockers, gas workers and general laborers. This "new unionism" was led by a group of socialists and was more class conscious than the earlier unionism. But despite the efforts of Keir Hardie and the Independent Labour party which he organized in 1893 the idea of independent political action by labor in contrast to the policy of supporting left wing Liberal candidates, known as Lib-Labs, was not abandoned by the trade unions as a whole until 1899. With the organization in that year of the Labour Representation Committee, which became the Labour party in 1906, the English labor movement secured a political wing which contrary to the situation on the continent was practically created and actually dominated by the trade unions. The Labour party was Fabian and not Marxian in its social philosophy and did not officially accept socialism as its philosophy and program until 1918. Contrary to the situation in Germany, where the trade unions had to struggle to escape from the domination of the Social Democratic party, the Labour party in England has struggled, although as yet unsuccessfully, to establish its independence of the trade unions.

These two essentially British types of labor activity—business unionism and a reformist non-revolutionary labor party—were challenged before the World War by a type of labor philosophy which came from France. Syndicalism with its opposition to both political action and collective bargaining and its emphasis on revolution through a general strike took a strong hold on the British labor movement before the war, as it did in the United States, Australia and New Zealand at the same time. In a country unaccustomed to revolutions, such as England, a modified syndicalism under the name of guild socialism pictured an economic organization of the state with the business man eliminated but with the technical engineers sharing power equally with the workers in a new constitutional government. The transition to the new system was to come peacefully and gradually through the extension of workers' control in the shops. This served to modify the English brand of socialism, which now began to look upon government ownership as dictatorship and to take over the guild ideas of an economic parliament. By the end of the war the movement had grown so strong that large scale experiments in its application, especially in the field of building, were attempted. The failure of these involved the dis-

integration and disappearance of the guild socialist movement.

The post-war labor movement in England has been seriously hampered by the economic stagnation from which the country has suffered since 1920. One characteristic result of that situation has been the decline in union membership and the weakened power of the unions. The unions have made strenuous efforts to resist concerted downward movements in wages and conditions of work. The most heroic of these efforts, unique in modern British labor history, was the general strike of 1926, called by the Trades Union Congress to protect the miners from an attack on their conditions of work, an attack which the congress regarded as a forerunner to a general attempt to lower the standard of living. The general strike idea had haunted the working class movement ever since the days of syndicalism and labor unrest before the war. But in the minds of the English workers it was by no means an essentially revolutionary idea. The basis of its appeal was a feeling that all the workers were subject to the same changes and that all must stand together in meeting them. The failure of the strike resulted in the passage of the Trades Disputes and Trades Union Act of 1927, which declared illegal all sympathetic strikes; in a strengthening of the Labour party at the expense of the trade unions; and in an increased emphasis on class collaboration as represented by the Mond-Turner conferences, which promised far reaching changes in English industrial relations until the opposition of the conservative employers nullified the work of the conferences.

The rapid rise of the Labour party to the point where it first displaced the Liberal party and twice (1923-24 and 1929-31) formed minority governments has been one of the outstanding features of the post-war British labor movement. The party has shown an inability and an unwillingness to use its strength to introduce definitely socialist measures. The crushing defeat which it suffered in 1931 was of some value in definitely eliminating from it the party elements which were essentially liberal rather than socialistic (see LABOR PARTIES).

Karl Marx' socialism was based on the factory system of England and was inapplicable to the merchant capitalism of the continent. Except for a brief spell of union organization after the Revolution of 1848 there was no labor movement in Germany until Ferdinand Lassalle issued his *Open Letter* in 1863. Lassalle's program

was quite different from that of Marx. Marx favored confining labor organization mainly to the economic field, proposing an international organization of labor to overthrow capitalism in all countries. Lassalle, on the other hand, sought to develop a political organization which would obtain universal suffrage in Germany for labor and then through control of the state subsidize workers' producers' cooperatives by state credit and taxation. His program ruled out trade unions and voluntary cooperatives, because each would be ineffective on account of the "iron law of wages."

Following these two divergent philosophies there developed in Germany a Lassallean political Allgemeiner Deutscher Arbeiterschaftsverband and a Marxian group founded by Bebel and Wilhelm Liebknecht in 1868. In 1875 these two combined to form the German Social Democratic party; the consolidation permitted the unification at the same time of the socialist trade unions. The Lassallean philosophy, however, dominated the German labor movement at the time. The antisocialist law of 1878 outlawed all kinds of unionism; when that law was discontinued in 1890, Marx' socialism was the dominant philosophy of the labor movement.

The trade unions, some of which had managed to exist after 1878 despite the restrictions and many more of which were organized after 1890, were subservient to the growing Social Democratic party. Under the leadership of Carl Legien, however, these unions gradually developed a philosophy and technique of their own. By 1906 they had obtained equal status with the Social Democratic party; and the check suffered by the latter in the election of 1907 solidified the position of the unions and converted the Social Democratic party, at least in practise, from a Marxian to a revisionist policy.

This continued until the World War, when both the trade unions and the political party supported the government. Unionism gained in influence and status during the war. It obtained joint boards of employers and employees and representatives on many government boards. Its crowning success came with the revolution in 1918 and the incorporation in the republican constitution of the status obtained by the trade unions in 1918 through a national agreement with the employers which granted full recognition; abandonment of "yellow" or company unions; abolition of discriminations against union members; the eight-hour day; shop committees; joint conciliation boards and joint adminis-

tration of employment bureaus. The power of the unions showed itself in their ability to defeat by a mass general strike an attempted reactionary *Putsch* in 1920. The development of a strong Communist party in Germany out of the Independent Socialist party, which broke away from the Social Democratic party in 1916 over the issue of supporting the war, has split the labor movement in Germany. The universal opposition between communists and socialists has been aggravated in Germany by the memory of the bloody repression of the Spartacist revolt of 1919 by the socialist controlled government. The Social Democratic party, which despite the fact that the communist movement shows greater political strength in Germany than in any other country outside of Russia was the largest single party in Germany until the election of July, 1932, has turned to the Catholic Center party, the Liberal Democratic party and the People's party for coalitions. Since 1929 the National Socialists, or Fascists, under Hitler have become the most formidable opponents of both unions and Social Democrats. Predominantly a middle class movement, Hitlerism has attracted many workers disappointed with the results of the revolution and has enlisted the support of many large industrialists and landlords who hope to establish a dictatorship to protect their profits and rents. The growth of this movement, with its avowed purpose of suppressing trade unions, socialists and communists, constitutes the most serious threat which the German labor movement has faced since 1878.

The labor movement in France before the World War presented a definite contrast to the English and German movements of the same period. Union organization in France dates practically from 1884, when the most important changes were made in the restrictive laws concerning labor organizations. But a definite subserviency to the socialist movement, itself divided into a number of groups, hampered the functioning of the unions. The organization of the Confédération Générale du Travail in 1895 initiated the development of a peculiar syndicalist labor movement, which disavowed the political actionists and the trade unionists. Its philosophy was formulated by Sorel at the beginning of the twentieth century. Its weapon was the sudden or general strike, whose object or tactics was to take over the factories or farms by "direct action"; to repudiate collective bargaining, or "collaboration with capitalism," which had been the goal of trade unionism; to have the fac-

tories or farms operated by an idealized working man turned business man; and to displace the state by an economic cooperation of "production for use" and not for profit. This philosophy of working men who were disillusioned by politicians disrupted the socialists and spread to many countries; it became the dominant characteristic of the labor movements in the Mediterranean countries.

The amalgamation in 1902 of the *Fédération des Bourses du Travail* and the *Confédération Générale du Travail* unified the economic side of the labor movement in France, but it resisted all attempts of the socialists to control it and in 1906 after a series of successful militant strikes it adopted in the *Charte d'Amiens* a definite statement of political neutrality. The coming of the war, however, shattered the non-political antimilitarist principles of the *Confédération Générale du Travail*. It supported the war, permitted its leaders to serve in the cabinets of the *Union Sacrée* and with rising prices and official government encouragement given in return for labor's support of the war doubled the trade union membership at the same time that it substituted the tactics of regular trade unionism for those of syndicalism. Superficially it still adheres to the *Charte d'Amiens*, but in practise since the failure of the syndicalist general strike of 1920 the French labor movement has tended more and more to follow the tactics of western European unionism. Both collective bargaining and legislation have been employed by the unions since the war.

Although the *Confédération Générale du Travail* remains the dominant economic group, the French Communists, organized in a separate union as the *Confédération Générale du Travail Unitaire*, have exercised on the industrial field a far greater influence in France than in any other capitalistic country. Catholic unions have also become significant since the war. A fourth group, syndicalist in nature, is insignificant. The best organized industries are those which are either semipublic, such as mines or railways, or entirely owned and operated by the government. Except in large centers the workers in private industry are largely unorganized, although they are often class conscious in the continental radical sense.

Despite the fact that France was the leader in antipolitical syndicalism socialism always has been influential with the French working man. As early as the general election of 1893

the socialists had fifty deputies and the majority control in many municipalities. Nationally and officially the Socialist party endorses the *Confédération Générale du Travail* and the whole cooperative movement. The C. G. T., which relies more and more on legislation and on government aid, finds that it must take an active part in politics. In doing so it definitely regards the Communists and the right parties as hostile and in practise restricts its political neutrality to the Socialists and the bourgeois parties of the left. The prevailing sentiment, however, in the higher circles of the C. G. T. is that the Socialist party is controlled by extremists who are not in sufficient contact with the trade union movement. On many questions, such as the capitalistic "rationalization" of industry, there is a difference of opinion. The Socialist party is lukewarm if not hostile to it, whereas the C. G. T. is wholeheartedly in favor of it. In accordance with the non-political tradition of French unionism even the communist unions are not officially related to the Communist party although they are in practise.

Unlike England, the United States and Germany, where capitalism developed at so rapid a pace that workers were unable even in groups to embark on production, in France capitalism developed at a comparatively moderate pace and producers' cooperatives of workers exist side by side with similar enterprises of capitalists. But by the end of the nineteenth century as a result of the increasing difficulty in obtaining credit and the growth of class consciousness consumers' cooperation had outdistanced that of producers. Since the war cooperation has moved in step with the newer economic development of France away from the isolated neighborhood cooperative to the chain store type of merchandising, with centralization in buying and with factories owned by the wholesale cooperatives. The *Banque des Coopératives de France* became the central financial organ for the movement. From its beginning the cooperative movement had been aided by the French state. It is the best customer of producers' cooperatives and in legislation has favored them against private competitors by the decree that where the bid is the same the contract goes to the cooperative.

The Italian labor movement prior to the World War had both a political and an economic wing. The former was split into three factions: the reformists, inspired by the revisionism of Bernstein; the "integratists," led by Ferri, who re-

sembled the German Social Democrats of that period; and the syndicalists under Labriola, who severed their connection with the Socialist party in 1907 and who did not become an important group until the war. The reformists split with the Socialist party in 1912 because of their desire for war; they became a part of the Italian nationalist movement which the war with Turkey over Tripoli in 1911 had stimulated. The divisions in the trade union movement followed those in the political movement. There were four different organizations: the Union of Industrial Workers, the Union of Agricultural Laborers, Chambers of Labor and the Catholic Union. The last was a small group and opposed to the other three (socialist) organizations.

The labor movement was from the beginning concentrated in the north. In the region of the Po river there developed a type of capitalistic farming with hired laborers and among these, but especially among the urban workers, socialism flourished. The movement was revolutionary to such an extent that the government under Giolitti prior to and during the World War was forced to compromise its previously conservative position in the interest of maintaining peace. This policy (*trasformismo*), by which the government tried to be all things to all men, prevailed down to the Fascist Revolution.

During the war the Socialists under Ferri remained to a large extent pacifistic. When the peace treaties gave Italy little in reward for her participation in the war on the side of the Allies, the Socialists had an important talking point; and the closing down of the war industries, the rise in the cost of living due to the rise in foreign exchanges, and the example of the Russian Revolution all contributed to turn the whole trend of labor toward revolution. This took the form of syndicalism, general strikes and occupation of industries and landed estates by the workers.

The movement soon failed, however, partly as a result of a lack of plan of organization, an inability to obtain credit and to market products but primarily because of the development of a well organized terroristic strike breaking organization in the form of Mussolini's Fascisti. The apparent purpose of the Fascist reign of terror was the suppression of trade union, cooperative and socialist organizations and it was for this reason that the movement secured financial support from the manufacturers, bankers and landlords. The establishment of Fascism was gradual; by 1925 it was fairly

well completed. In the following year the voluntary syndicates and trade unions were replaced by a nation wide compulsory scheme of syndicate organizations, which alone were recognized as legal. Four main classes of syndicates were set up: capitalists, agriculturalists, laborers and professional men. Each person in order to carry on a business or get a job must belong to one of these syndicates and pay dues to it. The syndicates, organized on a local, regional and national basis, with officers approved by the dictator, have made rules fixing wages and even output. Although the employers and employees were at first separately organized, the national Fascist federations of employers and employees were later combined into corporations.

Fascism embodies the negation of the class war; its essential principle is class collaboration and the substitution for the struggle between classes within the nation of the world struggle between nations. The interest of the workers, according to Fascist principles, ends at the national boundary; except for the quasi-governmental International Labor Organization no connections are permitted between labor organizations in Italy and similar organizations in other countries. Strikes and lockouts are forbidden under the law of 1926, which also provides for giving legal validity to all labor contracts. To enforce and interpret the contracts a system of labor courts is provided.

Class collaboration is therefore the supreme doctrine of Fascism. This is illustrated by the Labor Charter of 1927, which states that there is no conflict of interests between the various classes; that they work together for the greatest production and for the welfare of the nation; that private initiative is the most useful instrument for the welfare of the nation; and that the state interferes in production only where private initiative is lacking. While theoretically the Fascist state is formed out of functional economic groups organized into syndicates and corporations, economic groups are not paramount; instead the state is controlled by a relatively small political group organized on a military basis representing no economic class but recruited from the petty capitalists.

In Soviet Russia the situation is quite different. Here the labor movement is perhaps younger than that of any other important European country. For a longer period of time than elsewhere in Europe trade unions, except bogus organizations formed and controlled by the police, were illegal in Russia. Genuine union or-

ganizations nevertheless did develop despite the restrictions, particularly among the printers. The revolution of 1905 brought a promise of the legalization of trade unions, which resulted in a remarkable growth in union organization. But governmental control of these unions was still strong and contributed to the success of a drive by the employers which materially weakened the union movement. Russia entered the World War with a weak trade union movement; and when the revolution came, it was the social philosophy of the revolutionary socialist and communist parties which dominated rather than any wage conscious unionism.

The communist revolution was almost strictly an urban and wage earners' revolution based on the soviets, which were merely the central labor unions of the locality, a kind of organization which has arisen in all countries at periods when unionism is just beginning. Such were the trade unions of England and America in the decade of the 1830's; the soviets had already appeared in Russia in the short revolution of 1905. Springing up again after the February revolution in 1917 they represented a great variety of organizations and included "intellectuals" of various sorts. When the defeated veterans returned to St. Petersburg they were admitted to the soviets, which then became Workers' and Soldiers' Councils. Lenin and Trotsky advocated and effected the exclusion from these new soviets of the intellectuals and of those who, like the Mensheviks, favored trade union agreements and collaboration with employers; the soviets were then converted into proletarian organizations bent upon the destruction of the capitalist system.

It is an important fact, as Calvin Hoover has noted, that whereas competition for wealth is paramount in a capitalist country, competition for political power within the Communist party has taken its place in the Soviet Union. This competition really means a competition between political policies and has centered chiefly around the question of how far private or communist ownership of industry and agriculture may be permitted. The struggle on this point still continues but under the administration of Stalin there is a strong drive toward the entire prohibition of all private ownership and private trading. The labor movement of Russia has thus culminated in the most extreme doctrine of a classless government controlled solely by the class of propertyless wage earners.

Where Fascism definitely limited the activity

of its labor movement to the boundaries of Italy, Russian communism started from the principle that the revolution must be made world wide and must be continued until all the world has accepted communism. But the force of internal conditions and the stubborn resistance of capitalists in Germany and England as well as the development of Fascism in Italy and Germany have forced the Soviet Union to abandon the principle of world revolution in return for an opportunity to build its own national commonwealth. It now seeks world peace and feels that engaged as it is in the process of "building socialism" it would be the principal sufferer from a war. The political Communist International and the economic Red International of Labor Unions are still in existence and still function, but their revolutionary activities have been considerably circumscribed by the internal needs of Soviet Russia.

Fascism and communism, antithetical in their ultimate ideals and in their standards of value, present certain striking similarities in their practical consequences for the labor movement. The Soviet Union too has abolished the class war within the nation, not by the submergence of existing class interests but by an attempt to eliminate all classes. The dictatorship of the proletariat embodying the concept of a continuation of other classes is to be eliminated when the profit psychology has been eliminated—when all the people are workers and none lives by interest, rents or profits. In both Italy and Russia the edge of the class struggle has been dulled by government control of the policy and administration of the former voluntary trade unions and cooperatives. This has been done by the simple device of securing the appointment of members of the Fascist or Communist parties as officers of these associations. In addition in both countries the function of the trade unions has ceased to consist of representing the workers in conflicts with employers, and they now act as agencies for increased efficiency and productivity. In both cases they have become instruments for enforcing governmental policy.

In addition to the emergence of communism and Fascism, which have affected the form and functioning of the labor movement not only in the countries of their origin but in other countries as well, one of the most important developments of the post-war world has been the capitalism of the United States. Here the economic method of labor action has predominated over

both the political and the cooperative, because the overlordship of the aristocratic state and the church has been eliminated for more than one hundred years. The electoral suffrage began to be extended to the wage earners in the decade of the 1820's, full fifty years in advance of the countries of Europe. In the United States capitalism has had its greatest freedom of development; both capitalism and labor organizations have followed along clear cut economic lines.

Although American union activity has been essentially economic—directly through trade unions—there have been periods when labor has turned to other lines of action. As early as the end of the 1820's labor with its newly acquired franchise turned to political action to secure its ends. Parties which were distinctly labor developed in various eastern cities, but their practical proposals were stolen by other parties and they were left with the advocacy of radical measures which brought them into disrepute. In the period before the 1850's labor again turned to legislation, although not through independent action; such measures as public education, mechanics' lien laws and homestead laws received the general support of labor movements. With the organization of strong national trade unions after 1850 labor once more concentrated upon economic action. But not until the 1890's did this business unionism finally win out over the type of labor program which had been proposed by various early labor organizations in the United States, ending with the Knights of Labor, and which had attempted by voluntary association to substitute cooperation and self-employment for capitalistic employment on the democratic principle of one man one vote instead of the capitalistic principle of one share one vote. These organizations frequently broke down on the one issue of electing managers by popular vote. Or if they succeeded they passed over into capitalistic organizations by closing the doors to new members and hiring non-members for wages. The experience of the molders and the coopers with producers' cooperation ended this phase of the American labor movement, although in 1919 the railroad unions offered to assume partial control of the railways under the Plumb Plan.

American labor activity has not entirely eschewed political action, but it has refused to enter the political arena as an independent party or to cooperate in the formation of an independent labor party. Except for 1924, when

the American Federation of Labor supported La Follette for president, the official labor movement has tended to adopt the policy of supporting now one party, now the other, according to the benefits expected from the one or the other. This policy of rewarding friends and punishing enemies has been employed, however, primarily to insure the freedom of action of trade unions on the economic field and to secure the passage of certain measures which could not be attained through union action, such as workmen's compensation and immigration restriction. As for substantive contributions to the direct well being of the workers, such as social insurance laws, the American Federation of Labor has consistently opposed their passage, believing that these benefits should be provided or secured by the unions, thereby making the union member dependent upon his union only and not upon his employer or the government.

In line with its conservative non-political policy the American Federation of Labor has carefully and consistently avoided any socialist or communist affiliations and has even been prominent among the attackers of these social philosophies. Except for the year 1895, when the socialist sympathizers captured the presidency of the A. F. of L. and unseated Gompers, left wing groups have been unable to make any appreciable headway with the organization. Both boring from within and dual unionism have failed to make much impression on the movement as a whole, although individual unions, such as the International Ladies' Garment Workers Union, have been severely crippled by internecine fights between the communists and other members. Some unions and some sections have either openly supported socialists or communists or have actively participated in the formation of labor parties; but the movement as a whole has carefully avoided any such action and even in the depression election of 1932 the American Federation of Labor, although disappointed with the labor planks in the platforms of the two major parties, refused to support either the socialists or the communists.

Unionism in America received a tremendous impetus through the high prices and the prosperity of the war years. In the ensuing periods, however, membership declined—not only in the depression of 1920-21 but also in the prosperity period which lasted until 1929. The trade unions which do exist in America are still powerful—possibly more so than those in Europe. But capitalism in the United States seems to

have developed new methods of resistance to the spread of unionism. Diffusion of corporate ownership, labor legislation and voluntary concessions by giant corporations have apparently rendered unionism unnecessary to many of the workers. Large scale business has been forestalling unionism by providing for labor as much as or more than the unions offer. Another obstacle to the growth of a strong labor movement is the important system of promotion, which still offers outlets for members of the working class and hampers the development of class feeling.

Important contributing factors to the limited extent and the non-radical nature of American unionism were the areas of free land available in the west until the end of the nineteenth century and the successive waves of immigration, which complicated the problem of union organization by introducing racial and national antagonisms augmented by language difficulties. In the period before the World War it was relatively easy for large employers to replace groups which had learned to think collectively by new immigrants unaccustomed to the philosophy of unionism, anxious to get a start in a new country, pleased at the relatively high wages and unapproachable by the spokesmen of the older groups because of language difficulties. As fast as one group rose out of this state it was replaced by a new group. With the practical exclusion of immigrants after the war the problem of language barriers became less important. Regional shifts, such as that of the textile industry to the unorganized south, present new problems and the presence of a large Negro group, which the rank and file of organized labor has thus far almost consistently refused to admit, constitutes a perennial strike breaking menace, which has already given rise to such fundamentally economic outbreaks as the race riots in East St. Louis in 1917.

These two elements of free land and immigration, which would seem to be the common characteristic of new countries, were not present in the unique Australian labor movement. Faced from the beginning with a concentration and monopolization of landownership and consequent difficulty of rising beyond his status as a wage earner the Australian laborer has always been conscious of a scarcity of opportunity. This factor together with a homogeneity of culture arising from a common English ancestry, an early attainment of universal suffrage and the realization through experience that the government

serves the "master class" in any industrial disputes has led labor in Australia to resort to independent political action. At the close of the nineteenth century labor with the acquiescence or support of other groups moved for compulsory arbitration after the failure of an intense opposition to the strikes of the miners, shearers and maritime workers.

The Australian Labour party, which includes the parties of the various states, has steadily broadened its platform in the interest of the trade unions which dominate it. Having established compulsory arbitration in the commonwealth, New South Wales, Queensland, South Australia and Western Australia, it has attempted to establish union preference in the courts of arbitration; to maintain the self-sufficiency of Australian industry by high tariffs; and to achieve socialization of industry by a constitutional utilization of the federal, state and municipal governments. While no progress has been made in instituting a system of union preference in the courts, high tariffs have been effected and Australia has socialized her industry to a greater degree than any other capitalistic country in the world. With the support of the party trade unionism in Australia has steadily been strengthened, so that in 1931 about one half of all employees were members of unions. The courts of arbitration have been responsible for much of this growth, because they recognize as parties to disputes only those workers who are organized and they do not permit employers to discriminate against union members.

Because Australian capitalism has always been employer capitalism, unionism in Australia has tended to develop along industrial lines. An example of this is the Australian Workers' Union, comprising for the most part shearers and other agricultural workers, which is the largest and perhaps strongest union in Australia and constitutes one sixth of the total union membership. The Australian Council of Trade Unions, representing the bulk of union membership outside the Australian Workers' Union, has consistently urged the organization of labor along industrial lines and the formation of one big union.

But the characteristic feature of Australian unionism has been the creation of a "White Australia" by exclusion of all races and nationalities except the Anglo-Saxon. In many countries the division along racial and national lines has been more important than division along

economic lines. In countries where a single nationality predominates, such as Germany, England and Australia, race consciousness supports the labor movement and trade unions and political parties are more easily formed.

It is not surprising that when capitalist organization becomes international, the labor movement follows. This was a basic fact which Marx recognized in aiding the organization of the International Working Men's Association in 1864. But Marx' organization preceded by half a century the banker capitalism which is to be considered as the real beginning of international capitalism.

The international labor movement is at present made up of over seventy organizations divided into various systems of "tendencies"—socialist, communist, syndicalist and Christian—in addition to the quasi-governmental International Labor Organization (*q.v.*). Of these the International Federation of Trade Unions (or Amsterdam International, as it is known from the location of its central offices, which, however, were moved to Berlin after 1930) is still the largest and most coherent despite its decline in membership since 1921. It is composed of twenty-seven international trade secretariats made up of trade unions of the socialist type, is allied with the political Labor and Socialist (Second) International and cooperates with the International Labor Organization. Its membership of over 13,000,000 includes a majority of the trade unionists of Europe and some outside of Europe, although the American Federation of Labor is not represented. The federation withdrew in 1920 because, according to Gompers, the International had "become an international political body with sovietism as its logical result and a revolutionary program for 'socialization' and 'communism'." Some American national trade union bodies, however, continue to belong to the international secretariat for their industry.

The trend of Amsterdam is to merge the socialist ideal with the ideas of "workers' control" and of industrial democracy; its outlook is reformist internationalism, which regards the transition to a socialist society as a gradual and slow process. It conceives its main task to be one of promoting economic and social reforms under capitalism. The twenty-seven secretariats are little more than information bureaus and discussion centers. On the other hand, the need for international action is causing the miners' secretariat to support regulation of

the mining industry through an international commission. The metal workers, faced by the growth of international cartels, are backing a demand for an international cartel office under the League of Nations.

The communist Red International of Labor Unions was established in 1921 as a successor to the Provisional Council of Red Trade Unions, which was organized by the Third International in 1920 to break up the Amsterdam International with its definite socialist affiliation. The Red International of Labor Unions is organically connected with the Third International. The great majority of its membership is of course located in Russia.

The Christian trade unions which developed after the issuance of the papal encyclical *De rerum novarum* in 1891 organized an International Secretariat of Christian Trade Unions in 1908, which before the World War reached a membership of over half a million, more than two thirds of which was located in Germany. The war interrupted its activities, as it did those of the other labor internationals. It was reconstituted after the war and now has a membership of about a million and a half. Essentially its purpose is to try to allay industrial unrest and to establish economic justice on Christian principles.

The anarchist International Working Men's Association, which adopted the same name as Marx' First International as a sign of its claim to spiritual descent from that body, is the least important of the international organizations, with a membership of only a few hundred thousand.

The labor movement is thus seen to be amazingly complicated and diverse. There is scarcely a single principle or permanent trend underlying it except the aggressive principle of encroaching upon the domain of capitalism. Even this principle is in abeyance during a war for national survival or conquest. The movement in one country is not comparable with the movement in another country, and even in the same country it changes with transformations in the form and power of capitalism and in all the social movements.

Within the movement itself there are many conflicting trends, which weaken its aggressiveness; these range all the way from communism, syndicalism and unionism to cooperation, and they are broken up again into many different forms and temporary combinations. In some countries one or more of these conflicting internal movements rises to temporary predomi-

nance, while in other countries quite the opposite movements may predominate.

The modern world wide extension of markets together with the emergence of international combinations has correspondingly expanded the scope of the labor movement, which, however, has lost ground relatively to world wide capitalism. Racial and national differences have made the movement in one country different from that in another country where one language and one race may tend to effect an automatic solidarity. Differences in wages and standards of living have had an equally important part in the fluctuations of labor movements, and the cycles of full employment and unemployment have weakened them more than any other factor. Nevertheless, with the rapid improvements in technology, with the transition from an agricultural to an urban population and with the corresponding shift from small property owners to propertyless wage earners the labor movement by mere weight of numbers becomes a major problem of western civilization.

JOHN R. COMMONS

See: LABOR; TRADE UNIONS; COOPERATION; LABOR PARTIES; LABOR BANKING; LABOR LEGISLATION AND LAW; WORKERS' EDUCATION; INDUSTRIAL RELATIONS; COLLECTIVE BARGAINING; BARGAINING POWER; TRADE AGREEMENTS; GENERAL STRIKE; HOURS OF LABOR; LABOR, METHODS OF REMUNERATION FOR; UNEMPLOYMENT; STANDARDS OF LIVING; SOCIAL INSURANCE; JOURNEMEN'S SOCIETIES; CHRISTIAN LABOR UNIONS; AMERICAN FEDERATION OF LABOR; TRADES UNION CONGRESS, BRITISH; CONFÉDÉRATION GÉNÉRALE DU TRAVAIL; DUAL UNIONISM; INTERNATIONAL LABOR ORGANIZATION; CHARTISM; ANARCHISM; SYNDICALISM; SOCIALISM; COMMUNISM; GUILD SOCIALISM; FASCISM; SOCIALIST PARTIES; COMMUNIST PARTIES; CLASS; CLASS STRUGGLE; PROLETARIAT; REVOLUTION AND COUNTER-REVOLUTION; LABOR-CAPITAL COOPERATION.

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See also bibliographies on TRADE UNIONS; LABOR PARTIES; SOCIALISM; COMMUNIST PARTIES.

quest for a liberal education through indiscriminate assimilation of subject matter, which is unorganic and hence un-German, has brought about the standardization of individualities.

The reconstruction of Germany, Lagarde held, can take place only through the return to the genuinely Christian, old German piety and morals. In the sphere of religion his reform program meant the elimination of all Semitic and Roman elements and the formation of a national German religion, a doctrine later propagated by Ludendorff and the National Socialists. Demanding that politics be made thoroughly ethical he struggled against Bismarck and sought to cultivate the heroic virtues and to ground society in the army, the people and the professions rather than in the intelligentsia. He urged the replacement of parliament by a chamber of specialists and advocated eastern colonization, reagrarization and the regeneration of the conservatives. His educational aims were based also on Fichte's romantic concept that the essence of the German was something entirely individual and original and that this individuality was eternal and divine. In order that this individuality may be developed uniformly, authoritarianism, compulsory public education and worship of the state must disappear and schools must be made organic; in other words, religious and vocational.

HERMANN PLATZ

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LAINÉ, ARMAND (1841-1908), French jurist. Lainé was unquestionably one of the creators of modern private international law. He was the first incumbent of the chair devoted to the subject at the University of Paris, where he taught from 1881 to 1908. Lainé's chief work is the *Introduction au droit international privé* (2 vols., Paris 1888-92), a historical study of the conflict of laws from the fourteenth to the eighteenth

century which remains unexcelled to the present day. Of his many special studies the most celebrated, *La théorie du renvoi en droit international* (Paris 1909), is devoted to the famous theory of *renvoi*, which he steadfastly opposed. He believed that only confusion would arise from taking into consideration the rules of the conflicts of laws in a foreign country when the law of the forum prescribed the application of foreign law. In the light of history he demonstrated further the optional character of the rule *locus regit actum* and made a profound study of the rules of the *Code civil* relating to the conflict of laws (*Étude critique d'un projet de convention concernant la solution des conflits de lois*, Paris 1902). In his general doctrine Lainé is to be associated with the school of Savigny. His greatest contribution was his liberation and clarification of a subject which he taught with apostolic fervor at a time when it was generally neglected. With Renault, Lainé was one of the most influential delegates to the conferences on private international law at The Hague.

J. P. NIBOYET

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LAISSEZ FAIRE. Any attempt to write a historical account of the doctrine of laissez faire would involve traversing the history of orthodox economic theories, at least from the time of the French physiocrats to the middle of the nineteenth century. For classical economic theory, as it developed especially in Great Britain under the influence of Adam Smith, is with respect to the province of government based on the underlying assumption of laissez faire, that the economic affairs of society will in the main take care of themselves if neither the state nor any other body armed with coercive authority attempts to interfere with their working as determined by the individual actions of men. This assumption depends in turn on an optimistic view of the nature of the universe and on the conception of a "natural order" or system of economic harmonies which will prevail and work out to mankind's advantage in the absence of positive regulation.

It is impossible in a brief space to give more than a very general indication of the stages by which this doctrine rose for a time to a position of almost undisputed prominence among economic writers. Although the idea of laissez faire can be traced back to the earlier Italian economists, as, for example, Serra in the seventeenth century, the maxim itself—*laissez faire, laissez*

passer—derives from eighteenth century France and has been commonly attributed to Gournay, at first a merchant and later one of the intendants of commerce and a friend of Turgot. Turgot, however, in his *Éloge de Vincent de Gournay*, ascribes the phrase *laissez nous faire* to another merchant, Legendre, who is said to have used it in impressing upon Colbert the desire on the part of the mercantile community for non-interference by the state. The expression *laissez faire* has been sometimes ascribed also to d'Argenson. But it seems clear that Gournay even if he did not originate it amplified and popularized it in the longer form, *laissez faire, laissez passer*; and in the latter part of the eighteenth century it became in varying form a common expression among the physiocratic writers and those akin to them in thought. Adam Smith adopted from the physiocrats the underlying idea, although not the phrase, which did not become widely current in England until J. S. Mill used it in the title of one of the sections of his *Principles of Political Economy* (1848). Since then it has come to be identified most closely with the doctrines of the Manchester school in England, especially with the opposition to extended state intervention in industry through such measures as factory acts or acts regulating wages, and also in the sphere of commercial policy with free trade. The word Cobdenism is often used in England as practically equivalent to *laissez faire*.

In its immediate setting the doctrine of *laissez faire* as formulated by the physiocrats was primarily a protest against the vexatious system of regulations encompassing industry instituted by Colbert in the previous century; but in a deeper sense it was the outcome of the view that inasmuch as manufacture and commerce are unproductive of wealth and only serve as means of distributing it they should be left to take their own course free from taxation—which should be levied only on the productive forces of the land. This arrangement seemed to the physiocrats to accord with the dictates of the natural order, a concept which Adam Smith developed into the clearly formulated doctrine of a natural harmony under which the individual in pursuing his own economic interests mysteriously furthers the interests of the whole. This doctrine was closely connected in Smith's mind with the assumption that money coming into the hands of the state by way of taxation is likely to be spent unproductively and not in such a way as to further economic enterprise. It is significant that Smith's treatment of the problem of taxation and public

debt takes no account of the possibility admitted by even the most individualistic of modern economic writers that money in the hands of the state may be put to productive use. Obsessed by the vision of a mounting national debt and by a dread of the restrictive tendencies of state intervention in his own day, he failed to realize the possibility of productive state expenditure.

According to Smith's highly individualistic economic theory the source of wealth for the nation lies in the efforts made by individuals in their use of the factors of production—land, labor and capital—at their disposal and in their success in producing utilities under the inducement of a prospect of economic reward. Despite the fact that in the case of certain individuals this pursuit may be unenlightened, it is nevertheless axiomatic, according to Smith, that individuals acting independently are likely to be better judges than any collective body as to the means of producing the maximum amount of wealth. Collective management, except in industries that can be reduced to a simple and fixed routine, is deplored by Smith as conducive to sluggishness and lack of enterprise; hence his distrust of the joint stock company as a form of industrial organization. The individual, on the other hand, in pursuit of his own gain will strive to produce as much utility as possible and whether as employer or as workman will be driven by competition to do this as a condition of survival and success in business. The sum of the efforts of all the individuals to create the greatest possible amount of wealth will result, if they are allowed to follow their own bents, in the creation of the maximum wealth in society as a whole. This will happen because of the existence of a natural order, in which the interests of the individuals are harmonized with the good of society; and interference with the free working of this natural order although it may be justified in exceptional cases on non-economic grounds, as in the case of the navigation laws, is bound to diminish the total amount of wealth produced. Thus all forms of state intervention for the purpose of regulating commerce so as to produce either an influx of the precious metals or a "favorable balance of trade" are bound to diminish the total wealth of the world by diverting trade from the channels along which it would "naturally" flow into others which individuals, left to their own devices, would reject as less productive.

This conception of a natural order and a natural harmony, based on what human nature will

cause men to do if they are left alone, pervades and underlies not only Adam Smith's writings but those of all the classical economists of the late eighteenth and the early nineteenth century. It received moreover a powerful philosophic reinforcement from the teaching of the utilitarians. For the doctrine which erects pleasure as the end of human action and makes each man the only competent judge of his own pleasure fits in exactly with the notion that each man is the best judge of his own economic interest. Man pursues his economic interest as a means to pleasure; and as pleasure is regarded as quantitative and the pleasure of society is merely the sum of the individual pleasures of its members, that course which furthers most these individual pleasures must lead to the creating of the maximum of social utility. Benthamism was to be turned to very different uses at a later stage; but in the England of the early nineteenth century it became the powerful philosophic ally of laissez faire doctrines in the economic field. The economic good of society became, like the pleasure or happiness of society, simply the sum of the goods accruing to the individual members of society.

Adam Smith and his successors up to J. S. Mill based the theory of value mainly upon a consideration of the forces and factors of production. Value is conceived of as determined by the quantity of labor or of labor, capital and land embodied in a commodity or by the money cost of producing it—its "price of production," in Mill's phrase. This view of the value creating process placed the emphasis on the rewards meted out to the factors of production, which are regarded as inducements to produce as much as possible. These rewards, however, consist fundamentally not in money but in the goods which money will buy; and from the time of Stanley Jevons the emphasis of the theory of value shifts from the side of production or supply to that of demand. Jevons repudiated Adam Smith's distinction between "value in use" and "value in exchange" and measured the value of goods not by the cost of production or the amount of labor incorporated in them but primarily by their "utility"; i.e. their capacity to yield pleasure or satisfaction to the consumer. Production thus came to be thought of as a response to the economic stimulus of consumers' demand, and consumers' demand as an inducement to the producer to supply those goods which will yield the maximum total of satisfaction.

Under the new theories of value formulated in England by Jevons and on the continent primarily by the Austrian school of Menger, Wieser and Böhm-Bawerk the doctrine of laissez faire acquired a new sanction. Free consumers' demand regarded as the force governing supply in the absence of artificial restrictions was treated as the guaranty of maximum production of wealth and satisfaction; and state intervention came to be looked on as bad because it interfered with the free expression of consumers' demand by altering the conditions of supply and price. It is in these terms, vitally different from those of Smith or Ricardo, that the doctrine of laissez faire is at present justified, if at all. Emphasis is put no longer on the self-interest of each producer as making for the maximum production of economic values but rather on the assurance given by the free play of consumers' demand that the production of goods and services will be such as to create the maximum total of human satisfaction.

Economists who now hold laissez faire doctrines state the case mainly on this ground, urging the necessity for allowing free play to consumers' demand as a means to securing maximum utility in preference to attempts by the state or any other body, such as a combine, to fix or influence the prices of commodities or of services, such as labor. Only in popular economics does the argument that each purchaser by seeking his own advantage is most likely to promote the advantage of society as a whole still play any considerable part. In popular economics this argument is still prevalent, but it would be difficult to find much sanction for it in modern economic theory.

The conception of the "order of nature" and the "natural economic harmony," so dear to Bastiat and the free traders of the mid-nineteenth century, thus assumes a new form. But it remains essentially Benthamite or rather utilitarian. For its basis now is the view that the consumer is the best judge of his own satisfactions and that these are measured under conditions of laissez faire by the prices which he is prepared to offer for the various goods offered for sale. Bentham's calculus of pleasures as well as his doctrine that "pushpin is as good as poetry" finds economic expression in the price offers of the consuming public. Satisfaction is measured simply by price; or at all events economics is concerned only with satisfactions that can be measured in those terms.

As Marshall and many other economists have

pointed out, however, the case for *laissez faire* presented in this form cannot stand examination. For the consumers' price offers depend not only on the amount of satisfaction expected from what they buy but also on the size of their incomes. If incomes are unequal it cannot be said that equal price offers represent measurements of equal satisfaction; and there is no reason to suppose that a system which relies exclusively on the free play of consumers' demand will result in the maximum total satisfaction. Bentham's other principle, the greatest happiness of the greatest number, can be successfully invoked against any such deduction. For the greatest happiness might be promoted by a different distribution of wealth resulting in a quite different series of price offers by the consumers.

Thus in one of its aspects the case for *laissez faire* breaks down; and the utilitarian principle becomes an argument for state intervention designed to lessen the inequalities of income in order to promote the maximum of satisfaction. This constitutes the argument against *laissez faire* as regards state regulation of wages through minimum wage legislation and the use of taxation to bring about a redistribution of incomes. Moreover the same Benthamite argument of greatest happiness provides a case for factory and similar legislation designed to remove the causes of unhappiness which arise out of a system of "free" contract between employer and employed.

But it can still be argued that even if the state ought in the interest of the greatest happiness of the greatest number to interfere with the distribution of incomes, it ought not to interfere with the pricing of commodities; since each consumer is the best judge of what he wants, and given a satisfactory distribution of income the free play of consumers' demand will lead to the production of the maximum utility. Almost no one, however, would push this principle to the extreme point; for it will be agreed that the state can reasonably tax certain kinds of luxuries, especially those, such as alcoholic liquors, which are harmful if consumed to excess, and may provide or insure the possession of certain commodities, such as water, at a specially low price when it desires for social reasons to increase the consumption of them. Nevertheless, such instances may be regarded as exceptional and it may be held that by and large consumers' demand should be given free play in order that its price demands may stimulate the maximum production of satisfactions. In the international field

this supposition is at the root of the familiar case for free trade. Tariffs, it is argued, constitute an arbitrary interference with the free play of consumers' demand and tend for this reason to reduce the total of satisfactions. Free trade is indeed a logical corollary to the doctrine which makes consumers' demand the final arbiter of prices and production.

This view of the working of the price system is hardly consistent, however, with modern economic conditions. Price fixing under a system of increasing combination among producers has become more and more a function of production rather than of demand. The producer must indeed work within conditions set by consumers' demand; but the demand instead of fixing the price determines only what quantities can be sold at any given price level. The producers more and more fix the prices, either directly or by adjusting the quantity of goods placed on the market. They can of course do this only where some degree of formal or informal combination exists among them; but such combination has become so common as to be the rule rather than the exception.

The *laissez faire* doctrine was originally opposed not only to state intervention but also to combination designed to influence prices on the ground that this too must tend to decrease the total utility produced. But the efforts of its advocates to prevent combination through anti-trust legislation and by regulation of monopolies have either failed or resulted in a negation of *laissez faire* by calling for extensive intervention on the part of the state. Combination among producers cannot be prevented but at most only regulated. Preventive measures fail, and regulative measures result in an abandonment of *laissez faire*. Combination has therefore to be accepted by modern advocates of *laissez faire* as part of the system of private enterprise; and *laissez faire* comes to mean not the absence of combination but the fullest freedom of action for it. The price system if not regulated by the state comes to be regulated not by consumers' demand as a single force but by the producers acting within the limits set by consumers' demand. But prices fixed in this way can no longer be regarded as part of the order of nature or as having an inherent tendency to promote the maximum satisfaction.

At this point also the case for *laissez faire* breaks down in face of the transformation of the modern capitalist system from unregulated to regulated production. The tendency in modern

industry is not only toward a tariff policy based on conceptions of economic nationalism but also toward the building up both nationally and across national frontiers of large industrial units strong enough to exert a considerable measure of control over prices and output—thereby creating a new case for state intervention. The German cartel system and the measures taken by the state to control cartel prices furnish a good example of this tendency. The large scale organization and the necessity for state control which it involves lead in the direction of socialism; and the opponents of socialism, unable to rest the case for laissez faire on the old ground of consumers' freedom, are inclined to slip back to the older contention that laissez faire leads to efficiency in production and is the only means of providing producers with a sufficient incentive to do their best. Emphasis is no longer thrown on the pre-established harmony which causes the pursuit by each individual of his own self-interest to result in the well being of all; but it is argued that unless each man is left free to profit by his own exertions, free from state interference, there will be no incentive strong enough to stimulate an adequate development of the world's productive resources. This argument is most commonly advanced against socialism; that is, against any system under which industry would be publicly owned and conducted without recourse to the profit incentive. But it is also often used as a reason for keeping at a minimum state interference with privately run industry and against any heavy taxation of profits for the purpose of redistributing incomes.

But in effect under conditions of large scale industrialism, especially in the older countries, the actual conduct of productive enterprise passes more and more into the hands of salaried managers and the incentive of profit operates directly not upon the productive process but rather upon the investment of capital. The case for laissez faire thus comes to be largely a case for stimulating investment by allowing an adequate profit incentive to the stockholder or shareholder. Stated thus it provokes the socialist answer that if capital belonged to the community and the process of investment were accordingly socialized the incentive of profit would become unnecessary. The advocates of private enterprise and laissez faire retort that under such conditions only a dead level of mediocrity would at best be secured and that both the rewards of enterprise and the penalties of laziness and inefficiency are indispensable if production is to be

carried on properly. To this the socialist replies that a communal system would appeal to new motives of service and create a new corporate spirit in favor of doing one's best, which would be more than sufficient to replace the dying incentives of pecuniary gain and fear of unemployment.

The argument thus often becomes at this point an argument about human nature. But it is at bottom a question not so much of human nature as of the forms of organization and control that are appropriate to the technical powers of production available for man's use. The doctrine of laissez faire grew up and flourished in the nineteenth century, first, as a reaction against old systems of state and guild regulation that had become obstructive and oppressive as a result of the changing methods of production; and, secondly, as the outcome of a feeling that these powers would be most rapidly and thoroughly developed if individuals were left as free as possible to make use of them. The sufferings provoked by this unleashing of capitalist enterprise speedily led to the development of a new system of state regulation through factory acts and the like as well as to the growth of social legislation designed to correct in some degree the inequalities of income. But for some time these new forms of state interference remained external to the actual conduct of industry, merely laying down conditions to which private enterprise had to conform.

In the latter part of the nineteenth century, however, private enterprise underwent a radical change as a result of the advance of the new technical revolution. The growth in the scale of business organization was weakening the economic power of the consumer, whereas the growth of democracy was adding to his political power. This situation led inevitably to a demand that political power should be applied to positive economic ends—which was precisely what the advocates of laissez faire had been above all else concerned to deny. Cobden and Bright of course wanted to use the power of democracy for economic ends; but they thought of these ends as negative and not positive, as the removal of hindrances to the free working of the economic system and not as the assumption of control over it by the political power. But in practise this limitation could not be sustained when once economic power became organized and appeared no longer as a natural force but as a conscious control by the organizers of production. Modern large scale industrialism irretrievably destroyed

the theoretical basis of laissez faire doctrine as well as its political practicability.

But laissez faire, discounted as a doctrine and unworkable as a policy in any modern state, has still a powerful following. Except among socialists it is retained as a major premise, however many exceptions may be admitted; and each exception has to be justified by positive arguments against a strong body of opinion that even today regards state intervention in industry as in some sense "unnatural" and undesirable on a priori grounds. Nor is this surprising; for laissez faire established itself firmly as the basis of nineteenth century industrialism, and all the forces of economic conservatism are therefore now ranged on its side, as they were once on the side of the old regulative system which the physiocrats, Adam Smith and Bentham set out to discredit and destroy. Theoretically bankrupt, because the very forms of modern industrial organization are a denial of its first premises, it still fights everywhere a vigorous rearguard action. Its prestige and vitality, however, were seriously undermined by the World War, which caused a great increase both in the degree and extent of combination among producers and in the amount of state regulation of industry and left behind it a situation which compelled states to perpetuate their interference; moreover by promoting the growth of nationalism the war fostered the conception of a national industry closely linked up with the national state. This conception is as prominent in the national idea of Fascism in Italy as in Russian Communism; and it is at the back of the many projects of national planning which, largely under Russian influence, are now being put forward all over the world.

The separation between economics and politics, on which the doctrine of laissez faire rested, is an anachronism in the present day world. The use of political power for economic ends is universal; and although this does not settle the question whether socialism or capitalism is the better system it does make it impossible to rest the case for capitalism on the doctrine of laissez faire. For laissez faire is essentially a doctrine of individualism and free competition. But capitalism cannot be individualistic today and has long ceased to extol unregulated competition as an ideal. As a prejudice laissez faire survives and still wields great power; as a doctrine deserving of theoretical respect it is dead.

G. D. H. COLE

See: INTRODUCTION, section on THE RISE OF LIBERALISM; ECONOMICS: UTILITARIANISM; LIBERALISM; IN-

DIVIDUALISM; CAPITALISM; COMPETITION; FREE TRADE; FREEDOM OF CONTRACT; CONTROL, SOCIAL; GOVERNMENT REGULATION OF INDUSTRY; COLLECTIVISM; NATIONAL ECONOMIC PLANNING; COMBINATIONS, INDUSTRIAL; MONOPOLY.

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LAJPAT RAI, LALA (1865-1928), Indian nationalist and social reformer. Lajpat Rai studied law at Lahore and practised in the Punjab before he entered politics. He was deported in 1907 for

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LIBERTY. The basic idea of liberty as a part of the armory of human ideals goes back to the Greeks and is born, as the funeral oration of Pericles makes abundantly clear, of two notions: the first is the protection of the group from attack, the second is the ambition of the group to realize itself as fully as possible. In such an organic society the concept of individual liberty was virtually unknown. But when the city-state was absorbed by the idea of empire, new elements came into play. Stoicism especially gave birth to the idea of the individual and made his self-realization the main objective of human endeavor. Christianity added little to this notion by way of substantial content; but it added to its force the impetus of a religious sanction, not improbably the more powerful because Christianity was in its original phase essentially a society of the disinherited, to whom the idea of the eminent dignity of human personality as such would necessarily make an urgent appeal. In this stage it is difficult to dissociate the idea of liberty from that of equality, with which it is frequently intertwined. But as Christianity became the triumphant religion of the western world, the idea of equality became largely relegated to the theoretical sphere; and the liberty in which the church became interested was that of ecclesiastical groups seeking immunity from invasion at the hands of the secular power. In this aspect the liberty it sought was in essence indistinct from the liberty claimed by other groups in the mediaeval community. For until the end of the fifteenth century, roughly, the defense of particular liberties against invasion by external authority was the work of a functional group, such as the barons of Runnymede or the merchants of London. In this period liberty may be said to have resolved itself into a system of liberties or customary negative rights which were bought and sold between the parties for hard

cash. Custom became codified into law, and the invasion of custom came to be taken as a denial of liberty. There is little that is universal about such a conception of liberty; the group is largely defending itself from attack without undue regard to the interest of other groups. Thus in mediaeval England liberty had no meaning for the villein; and it is hardly illegitimate to argue that those who fought for liberty when they wrung Magna Carta from King John were good syndicalists whose minds were largely bounded by the narrow demands of a small group within the realm. Liberty has been as often the rallying cry of a selfish interest intent upon privilege for itself as it has been the basis for a demand which sought the realization of a good wider than that by which it was itself affected. It is therefore not unfair to describe the mediaeval idea of liberty as a system of corporate privileges wrung or purchased from the dominant power and affecting the individual less as himself than as a member of some group in whom those privileges cohere.

Philosophically no doubt restraint upon freedom of behavior has always been resented as an invasion of individual personality. But historically the best way of regarding the substance of liberty in the modern period as well as in the mediaeval is to realize that the new elements which enter into its composition at any given time have almost invariably been rationalizations of particular demands from some class or race or creed which have sought a place in the sun denied to them. Thus the history of religious liberty has been the demand for toleration by group after group of dissidents from recognized creeds, few of which have been willing to admit the claims of their rivals to toleration. So again the history of the franchise has been the demand of men for the right to share in political power, while many of those to whom the right has been granted have had no difficulty in urging that it was unwise or unjust to admit the next claimants to their place; Macaulay, who urged with passion the enfranchisement of the middle class, opposed not less urgently the grant of universal suffrage on the ground that it would necessarily dissolve the fabric of society.

The Reformation may be said to have been the most important factor in revitalizing the stoic doctrine of the primacy of the individual and in giving a new emphasis to individual rights as a separate and distinct subject of liberty. The breakdown of the *republica christiana* gave birth to new religions; these by demanding toleration

gave birth, even if painfully and in doubt, to the idea of liberty of conscience. The centralization of monarchical power consequent upon the breakdown of feudalism made political liberty more abstract and general than it had previously been; and the discovery of the printing press gave to the idea of freedom of expression within the general concept of political liberty a valuable concreteness which it had never before possessed. Nor is this all. The voyages of discovery synchronized with the emergence of a capitalist economy, and the importance given by the character of this economy to the individual entrepreneur made the problems of civil and economic liberty take on a new sharpness of form. By the time of Locke the idea of the individual as the embodiment of certain natural and imprescriptible rights which authority is not entitled to invade had become a commonplace of political speculation.

In a sense the emergence of the Reformation state on the ruins of the mediaeval commonwealth meant the substitution of the idea of the nation for the idea of the group; and it would not be illegitimate to argue that until the maturity of capitalism in the nineteenth century the struggle for national liberty proceeds along parallel lines with that of individual liberty. The two become until the threshold of our own day the two supreme embodiments of that passion for self-realization which has always lain at the root of the idea of liberty. The nation rejects the subordination of itself to an external authority just as the individual seeks to define for himself spheres of conduct into which external authority is not entitled to enter. Each seeks to make its claims as absolute as possible. The one for that end assumes the panoply of a sovereign state, thereby recognizing no superior; the other attempts to define the limits of governmental interference in terms of wants he discovers as brooking no denial. The history of the search for national liberty resulted in a chaos of sovereignties which stood in sharp contrast to that unified economic life made possible by scientific discovery; and it was clear that the history of the twentieth century would be largely occupied in bringing order into the anarchy to which the struggle for national liberty had given birth.

Something not dissimilar occurred in the history of individual liberty. So long as it was conceived as a body of absolute rights inherent in the individual and entitled to be exerted without regard to their social consequences, liberty was divorced from the ideas of both equality and

justice. The individual became the antithesis of the state; and liberty itself became, as with Herbert Spencer, a principle of anarchy rather than a body of claims to be read in the context of the social process. The reason for this evolution is clear. The body of ideas we call liberalism emphasized the undesirability of restraint, because those who gave it birth had mainly experienced the state as an organization interfering with the behavior they regarded as necessary to self-realization. Because of this they sought to reduce the state to the role of a mere guardian of order, keeping the ring in a vast competition of individual strivings of men who received in the social process the reward to which their effort and ability entitled them. *Laissez faire* was assumed at once to maximize self-realization on the one hand and on the other to serve the state by selecting the fittest for survival. Historic experience and biological principle seemed to the Victorian age to canonize the classic antithesis of individual and state.

The conception of an individual whose liberty was a function—the maintenance of order apart—of the weakness of the state was intelligible enough in its period. It failed to take account of the fact that the differences between men are too great under such conditions to make self-realization possible for more than a few. Liberty in a *laissez faire* society is attainable only by those who have the wealth or opportunity to purchase it; and these are always a negligible minority. Experience accordingly drove the state to interfere; and the liberal state of the nineteenth century was gradually replaced by the social service state of the twentieth. This may be described by saying that it again joins the ideal of liberty to that of equality, and this in the name of social justice. As the claims of liberty broke down the privileges of birth and creed, so with obvious logic they began an assault upon the claims of wealth also. The state was increasingly driven to widen its functions to mitigate the consequences of that social inequality to which the system of absolute liberty gave rise. Education, public health, provision against unemployment, housing, public parks and libraries are only a few of the outstanding services it was driven to organize in the interest of those who could not be expected to help themselves. Democratic agitation, which from 1600 to about 1870 had been occupied with the removal of barriers upon individual action, after 1870 began to press for the deliberate creation of equalitarian conditions. It has become clear,

in a word, that the idea of liberty depends upon the results of the social process at any given time; and it is against that background that its essential elements require analysis.

Liberty may be defined as the affirmation by an individual or group of his or its own essence. It seems to require the presence of three factors. It seeks in the first place a certain harmonious balance of personality; it requires on the negative side the absence of restraint upon the exercise of that affirmation; and it demands on the positive the organization of opportunities for the exercise of a continuous initiative. The problem of liberty has always been the prevention of those restraints, upon the one hand, that men at any given period are not prepared to tolerate and, upon the other, the organization of those opportunities the denial of which results in that sense of frustration which when widely felt leads to imminent or actual disorder.

So regarded, two things are clear about liberty. While its large outlines may have a fairly permanent character, its particular content is always changing with the conditions of time and place. To one age the demand for liberty may express itself in an insistence upon religious toleration; to another political enfranchisement may be its essential expression. This serves to remind us that liberty is always inherent in a social process and is unintelligible apart from it. Liberty therefore must always be conceived, if its philosophy is to be an adequate one, as related to law. It can never be absolute; some restraints are inevitable, some opportunities must be denied, simply because men have to live with one another and move differently to the attainment of antithetic desires. So closely moreover is this network interwoven that we cannot ever seek permanently to define a sphere of conduct within which freedom of action may be defined as liberty. For while we may claim, to take an obvious example, that there is unlikely to be liberty in any community in which there is no legal right to freedom of speech, we cannot maintain that an absolute right to say what he pleases is or should be inherent in any person; it is not, as Mr. Justice Holmes has said, a denial of freedom of speech when a man is prohibited from crying "Fire!" in a crowded theater.

Liberty, in a word, has to be reconciled with the necessities of the social process; it has to find terms upon which to live with authority. Those terms have never been absolute or unchanging; they have always been a function of the historic environment in some given time and place. And

that environment has always given birth to its own system of ideas, to which it has contributed some special emphasis in the notion of liberty, born of its peculiar conditions. That emphasis is always seeking its translation into an idea of law, whether by way of negation or affirmation; and the relation of authority to the substance of this idea is usually dependent upon what those who exercise authority consider will be the effect of the translation upon the order they seek to maintain. Trade unions demand the right to combine; authority admits that right or stigmatizes it as conspiracy, according to whether it considers the admission compatible with the way of life it seeks to uphold. A religious group demands the removal of the barriers upon the admission of its members to citizenship; the action of authority will turn upon its judgment of the consequences of the demand. Usually it will be found that the action of authority turns upon its estimate of the power possessed by those who make the demand and the way in which they will use their power; that is the truth embodied in Royer-Collard's great aphorism that liberty is the courage to resist.

The history of liberty since the Reformation has largely passed through two great periods. In the one the essence of the struggle for its realization has been to free the individual from subordination to a position, religious, political or economic, in which he has been placed by an authority external to himself. The effort has been the conferment upon him of rights—that is, of claims recognized by the law—which he is to enjoy without regard to the groups to which he may belong. This may be called the period of personal emancipation, and its classic expression is in the program of the French Revolution. The conception of society involved in it is that of an aggregate of persons; and it is argued that the fewer the restraints upon the free play of personality, the greater will be the liberty attained. Social effort is devoted to the destruction of privileges which inhere in some specially favored groups. It is generally conceived that the more men are let alone, the less positive the action of the state, the more likely is the individual to be free. In this period liberty is related to justice and equality in a negative way. My relation to my neighbor is deemed socially adequate if the state does not positively intervene to confer benefits upon him which I do not enjoy. Religious privilege, political privilege, privileges of birth or sex or race, little by little go by the board.

But in the period which roughly synchronizes with the growth of the modern proletariat it is rapidly discovered that the merely negative liberty to do what one can does not give freedom to the masses. We then enter upon the period of social emancipation. Government becomes increasingly paternalistic. It regulates the behavior of individuals and groups in the interest of an increasing complexion of equality in their lives. The size of the community tends to make the individual less and less significant. He has to obtain his liberty in concert with others similarly placed in the society to which he belongs. In this period the emphasis of liberty is predominantly in the economic sphere. Men become increasingly aware that grave inequalities in property mean grave differences in access to liberty. The struggle for freedom is largely transferred from the plane of political to that of economic rights. Men become less interested in the abstract fragment of political power an individual can secure than in the use of massed pressure of the groups to which they belong to secure an increasing share of the social product. Individualism gives way before socialism. The roots of liberty are held to be in the ownership and control of the instruments of production by the state, the latter using its power to distribute the results of its regulation with increasing approximation to equality. So long as there is inequality, it is argued, there cannot be liberty.

The historic inevitability of this evolution was seen a century ago by de Tocqueville. It is interesting to compare his insistence that the democratization of political power meant equality and that its absence would be regarded by the masses as oppression with the argument of Lord Acton that liberty and equality are antitheses. To the latter liberty was essentially an autocratic ideal; democracy destroyed individuality, which was the very pith of liberty, by seeking identity of conditions. The modern emphasis is rather toward the principle that material equality is growing inescapable and that the affirmation of personality must be effective upon an immaterial plane. It is found that doing as one likes, subject only to the demands of peace, is incompatible with either international or municipal necessities. We pass from contract to relation, as we have passed from status to contract. Men are so involved in intricate networks of relations that the place for their liberty is in a sphere where their behavior does not impinge upon that self-affirmation of others which is liberty.

In short, the problems of liberty in a plural-

istic world are extraordinarily complex. The individual who seeks self-realization finds himself confronted by a network of protective relationships which restrain him at every turn. Trade unions, professional and employers' associations, statutory controls of every kind, limit his power of choice by standardizing the manner of his effort. He has to adjust himself to an atmosphere in which there is hardly an aspect of his life not suffused at least partially with social regulation. To do anything he must be one with other men; for it is only by union with his fellows that he can hope to make an impact upon his environment. And even outside the realm in which the state defines the contours of his effort he finds himself surrounded by a complex of social customs and habits which force him despite himself into conventional modes of behavior. The scale of the great society is definitely unfavorable to the individuality of an earlier period.

One other aspect of this position is notable. The history of liberty has been the growth of a tendency to take for granted certain constituent elements in its substance. There is certainly greater religious freedom, for example, than at any previous time. But when the causes of this change are analyzed, it will be found that the growth of religious freedom is a function of the growth of religious indifference. The battle of liberty is not won but merely transferred to another portion of the field. As the contest over the place of individual property in the state becomes more sharp, the state limits freedom of expression and association in those matters which seem to it dangerous to the principles it seeks to impose. Social instability and liberty are antithetic terms. A society is tolerant when men do not challenge the foundations upon which it rests. Wherever these are in question, it moves rapidly to the conditions of dictatorship; and the elements of liberty are unattainable until a new and acceptable equilibrium has been reached.

It is therefore relatively easy to say what things go to make up liberty; it is extraordinarily difficult to say how its atmosphere can be guaranteed. Liberty can be resolved into a system of liberties: of speech, of association, of the right to share fully in political power, of religious belief, of full and undifferentiated protection by the law. But the question of giving to these separate liberties factual realization turns upon the objects to which they are devoted in any particular society at a given time. No doubt in Soviet Russia a Communist has a full sense of liberty; no doubt also he has a keen sense that

liberty is denied him in Fascist Italy. Liberty in fact always means in practise liberty within law, and law is the body of regulations enacted in a particular society for its protection. Their color for the most part depends upon its economic character. The main object of law is not the fulfilment of abstract justice but the conference of security upon a way of life which is deemed satisfactory by those who dominate the machinery of the state. Wherever my exercise of my liberty threatens this security, I shall always find that it is denied; and in an economically unequal society an effort on the part of the poor to alter in a radical way the property rights of the rich at once throws the whole scheme of liberties into jeopardy. In the last resort liberty is always a function of power.

It is no doubt true that men have endeavored to set the conditions upon which liberty depends beyond the reach of peradventure. Locke sought to do so by his conception of a limited liability state; but experience has grimly shown that in times of crisis the limits of the liability cannot be maintained. Montesquieu argued that liberty is born of the separation of powers in a state; but the truth of his argument is at bottom the very partial one that men are unlikely to be free unless the judicial authority is largely independent of executive and legislature. The constitutions of many modern states have sought to make the alterations of certain fundamentals a matter of special difficulty in order to protect the liberty of their subjects from invasion. Experience suggests that the technique is not without its value; but, as war and dictatorship have shown, it is an expedient for fair weather, always liable to fundamental neglect in times of crisis. It seemed to de Tocqueville that large local liberties were the secret of a general free atmosphere; liberty, he thought, is born of the wide distribution of power. But this appears to be true only when an equal society can take such advantage of the distribution as to make its benefits unbiased in their incidence; and in the struggle for such a society not the most unlikely thing is the rapid disappearance of this characteristic. The great idealist school of political philosophy has found the essence of freedom in obedience to the general will of the state; but it cannot be said that it has made clear, save to its own votaries, either the nature of a general will or the conditions under which a general will, if it exists, may be said to be in effective operation. An important school of modern publicists has sought to find the essential condition of lib-

erty in a supply of truthful news, since in its absence no rational judgment is possible. But it is clear that the supply of truthful news depends upon men being equally interested in the results which the impact of news may make upon opinion; and no such equal interest exists, above all in an economically unequal society.

Generally it may be argued that the existence of liberty depends upon our willingness to build the foundations of society upon the basis of rational justice and to adjust them to changing conditions in terms of reasoned discussion and not of violence. But if that be the case, the existence of liberty depends upon the attainment of a society in which men are recognized to have an equal claim upon the results of social effort and the general admission that if differences are to obtain these must be proved desirable in terms of rational justice also. In this background, as Aristotle saw at the very dawn of political science, liberty is unattainable until the passion for equality has been satisfied. For the failure to satisfy that passion in an adequate way prevents the emergence of equilibrium in the state. Its foundations are then in jeopardy because men are disputing about fundamentals. In such circumstances proscription and persecution are inevitable, since the community will lack that unified outlook upon the principles of its life of which liberty is the consequence. Men who differ upon ultimate matters, particularly in the realm of economic affairs, are rarely prepared to risk the prospect of defeat by submitting their disagreement to the arbitrament of reason. And when reason is at a discount, liberty has never had a serious prospect of survival.

HAROLD J. LASKI

See: CIVIL LIBERTIES; FREEDOM OF SPEECH AND OF THE PRESS; FREEDOM OF ASSOCIATION; INDIVIDUALISM; LIBERALISM; LAISSEZ FAIRE; ANARCHISM; NATURAL RIGHTS; STATE; LAW; AUTHORITY; COERCION; OBEDIENCE, POLITICAL; DEMOCRACY; EQUALITY; PROPERTY; SOCIALISM; COMMUNISM; DICTATORSHIP; INTOLERANCE.

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is exposed. The faith of the early nineteenth century that "reason" and content would necessarily flow through the new channels of communication provided by literacy is still echoed: in twentieth century America strikes have been laid to uncontrolled passion and the passion itself to illiteracy. However misguided the faith appears when accompanied by its premises, it would be rash to say that the nineteenth century advocates of literacy were wholly wrong in their conclusions. The two outstanding recent revolutions have begun in countries with large percentages of illiteracy and perhaps in their campaigns for liquidation the revolutionary governments now established only prove their awareness of the human tendency to give assent to the written word, whether the word speaks for tradition or for innovation.

HELEN SULLIVAN

See: WRITING; EDUCATION; ADULT EDUCATION; LITERATURE; PRESS; PRINTING AND PUBLISHING; INNOVATION; MOBILITY, SOCIAL; MIDDLE CLASS; DEMOCRACY; NEGRO PROBLEM; NATIVE POLICY; ISOLATION; IMMIGRATION; URBANIZATION.

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LITERATURE. Viewed as a whole a body of literature like a body of magic or a system of law is part of the entire culture of a people. The characteristic qualities that distinguish it from other literatures derive from the characteristic qualities of the life of the group. Its themes and problems emerge from group activities and group situations. Its significance lies in the extent to which it expresses and enriches the totality of the culture. Although the groups with which anthropology ordinarily concerns itself are preliterate, the functionalist standpoint as developed in anthropology is illuminating when applied to the setting of literature in a culture. Viewed thus literature is neither

an esoteric activity, as the formalists would contend, nor a purely instrumental activity, directed to external ends in the group life, as the extremist element in the Marxian school would have it. It is an integral part of the entire culture, tied by a tissue of connections with every other element in the culture; yet possessing a function of its own and ministering best to the life of the group where it performs that function with the greatest artistry and the deepest congruity with the basic assumptions and the accredited purposes of the group. And it should be added, to point the complexity of relationship, that these basic values are not something given but are the end products of a past in which literature has itself played a substantial part in the process of cultural construction.

Literature is thus both culture forming and culture ridden. Its connections with society are so integral and pervasive that there is a temptation within every sociological school of criticism to press to the conclusion that society is the play itself and not merely the backdrop against which the play is enacted. Certainly the range of social influences on literature is as broad as the entire range of operative social forces: the prevailing system of social organization—including the class structure, the economic system, the political organization and the deeply rooted institutions; the dominant ideas; the characteristic emotional tone; the sense of the past and the pattern of the future; the driving aspirations and “myths,” and their relation to the contemporary realities. There is nothing in the compass of social life that does not play its part—small or large, directly or by deflection, immediately or by varying removes—in giving literature the impress of its surrounding world.

The sort of determinism which this involves is not, however, the rigid and mechanical determinism that has played havoc with the charting of relationships in the entire realm of social life. It cannot afford to isolate a single element in society—whether economic or ideological—and assign to it a causal role in the final determination of literature; nor can it premise an immediacy of relation between literature and the social factors or a quantitatively equal response to the impact of social forces. The whole of the social process—including material, conceptual, emotional and institutional elements—may be regarded as containing the potential determinants of the direction and character of

the literature of a period. At any time the pace and character of social and intellectual change sharpen issues, pose problems, precipitate conflicts and establish harmonies that are distinctive for that time; a “social situation” is brought into the area of operative influence which, in its selection of elements and in its orientation, is unlike any other social situation. And while this selective process is projecting certain dynamic and significant issues into the consciousness of the time and obscuring others, another selective process is at work, from the side of the writer, singling out those elements which have managed to produce an impact on him and weaving them into a pattern which is compatible with his standards of art and his view of human life. Where these two mechanisms of selection interlock in the work of a particular writer a point of contact is established between literature and society.

In terms of such a dynamic and selective process some justice can be done to the subtle and complex connections that link literature to the operative social whole. Critics who attempt to test the hypothesis of a socially determined literature by measuring the degree to which certain great writers were absorbed in the public issues of their day set up a mechanical unilinear determinism which they find no difficulty in destroying. Thus it might be shown that Chaucer’s poetry is a poor mirror of the more obvious political issues of the England of his day, and that even Shakespeare was alive to the glory of the victory over the Armada but not to the realities of the enclosure movement. But such a line of inquiry assumes a simplicity that does not exist in the functioning of the social process. Any appreciable change in the social process communicates itself to the body of literature not directly but through a ramifying network of social relations, with every chance that its force may be multiplied or deflected in the devious process of transmission, or that its influence will be complicated, distorted or nullified by some other change arising elsewhere in the social process. For society is neither neat structure nor unobstructed process: it is a complex of end products from the past, of functioning institutions in various stages of development, of tangled idea and emotion, of hesitant purpose and frequent cross purpose. In such a milieu the surprising fact is not that there is so little clear evidence of the transmission of social change to the literary process, but that there is so much. In the case of particular

writers the relation seems of course even more erratic than in the case of a body of literature. For to what extent the social process will push its significant changes across the threshold of the writer's consciousness, and to what extent he will embody even that proportion in the emotional pattern that constitutes his artistic vision, can be explained only by the conjunction of his own biography with the history of the society.

The essential task of literature is to lay bare the foundations of human emotion: to this revelatory process the social forces can give only direction, impetus and an ideological impress. It is a commonplace of criticism that literature transcends the boundaries of the particular culture, that it speaks "the universal language of the human heart." Whatever the culture, its basic literary themes are the same—birth and death and love and jealousy, individual conflict, communal experience, triumph and defeat. They are linked to the biological bases of life, to its psychological invariances, to the necessities of the collective experience. It is significant that the literatures of the most varied cultures have meaning and beauty for an outsider even when their social organizations seem to him bewildering and their basic values absurd. For the artistic imperative to which literature is the response is universally operative. Everywhere the writer takes the stuff of experience in the life of the group and washes it in the powerful emotional stream of his personality. The drab incident is made vital, the abstraction human and dramatic, the idea imaginative. Homer's gods survive across the centuries because they are humanized; Dante's theme of divine love is made immediate and dramatic; and the group activity that is the theme of modern proletarian writing is translated into terms of its incidence on individuals. For the literary process society is only the river bed; the stream is the flow of human life.

In fact the two processes are scarcely as distinct as that. The emotional pattern of the individual writer, which could claim, if anything could, to be a primary datum, is as a matter of actuality socialized in the very process of construction, and the individual artistic vision is a selection from potential elements; the emotional response of the reader is the product, as Tolstoy points out, of a sort of social contagion and certainly proceeds in an emotional milieu already socially conditioned; the valuation of the writer and the guidance of the reader—

the dual task of a highly subjective body of criticism—proceed by canons which, to avoid being chaotic, must be socially rooted. Literature is whatever reaches through words to the human; but in the process the entire social realm must be traversed.

Literature is seen in clearest social perspective as an institution—a cluster of structure, usage, habit, idea, technique—the whole containing a principle of growth of its own but responding always to the change and stir in the varied life of the institutions with which it is interwoven. And as such it consists of a scheme of controls, through which it performs its social function by organizing the verbal expression of experience and thus integrating on an emotional level the activities of the group with its underlying view of life.

The basic material of literature is thus experience. But the experience that has found expression in literature has never been as broad as that of the entire culture. It is always a limited experience that is thus embodied—the life and the vision of life of particular groups within the culture. In the literature of Periclean Athens it is the experience of the male citizenry that is expressed, but not of the metics or the slaves or the women; in the literature of imperial Rome it is the experience largely of a leisure aristocracy and not of the industrial population or the serfs or, with some exceptions, of the provincials; in the literature of mediaeval Europe it is the experience only of a fighting, jousting and love making nobility; in the literature of China it is the experience of a high officialdom or of a petty bureaucracy, but not of the masses of peasantry. Sometimes the confines of expression have been determined by the class groupings, sometimes by the distribution of literacy and leisure, sometimes by arbitrary and traditional tabus. In fact literary history could be approached illuminatingly from the point of view of the forces that have drawn various groups and strata of the culture into or kept them out of the body of literary expression. In the western world there has been since the breakdown of feudalism a steady extension and widening of the limits, so that new groups have been continually drawn into the literary process—first, generally, as readers and then as writers. The entire period since the commercial revolution has been dominated by the rise of the middle class to the literary hegemony in the new capitalist nation states that

succeeded the feudal regime. And the anticapitalist revolutionary movements of the last hundred years have carried with them, both as result and as an integral part of their purpose, the opening of channels of expression for the experience of the underlying population—from the workmen's literature of Chartist England and of the France of George Sand to Gorki's delineation of the life of outcasts in czarist Russia on the eve of the revolution and the direct and unvarnished writing of worker correspondents in Communist Russia.

The large tidal changes in making new and untapped resources of experience available for literary expression have resulted from changes in class stratification. Another accession of experience, that of women, was made possible by the breaking down of the tabu which women's inferior economic position had placed about the masculine monopoly of writing; the timidity with which Jane Austen and Emily Dickinson wrote indicates the gap between their period and that of the present when it is often possible for a woman to have, in Virginia Woolf's phrase, "a room of her own." But tied up with these changes affecting class and sex groupings there have been shifts of intellectual horizon, contacts with hitherto unfamiliar cultures, reorientations in the effective moral codes, which have broadened and deepened the experience of the entire culture and which have uncovered new levels within the individual consciousness. The effects of the crusades and of the Renaissance on western European literature, of the geographical and scientific discoveries on Elizabethan literature, of the rise of urban life on the eighteenth century novel, of European expansion into the exotic regions of the Far East on late nineteenth century French literature, of the disintegration of rigid bourgeois morality upon the entire range of western literature at the turn of the twentieth century, as exemplified especially in Hardy, Ibsen and Dreiser, and of psychoanalytical research and speculation on the modern novel are instances of how the large and pervasive social forces uncover new strata of experience. The forces mentioned are of course in no sense primary or crucial; they are themselves merely links in the endless interlocking chain of causation and concomitance that constitutes the process of history; but from whatever source they proceed, the part they play in broadening, enriching or impoverishing the field of human experience constitutes their primary significance for literature.

Literature in turn in organizing this experience in language patterns heightens it as well; it selects and points out evocative values not appearing on the surface. But to do this consistently requires more than a philosophic or deeply human sense of values, although that is indispensable. It requires also a preoccupation, much like that of the philosopher or the scientist in his own realm, with the dramatic and significant in human behavior; a disciplining of sensitivity and perception; a familiarity with a far flung body of traditions; a mastery of a technique. In this sense literature takes on the apparatus and the conscious scrupulousness of the other arts. Vergil's desire, after years of constant polishing of the lines of the *Aeneid*, to destroy the whole poem at his death because some passages still remained inferior and Flaubert's balancing of *le mot juste* are merely the more familiar instances of an inherent pressure toward refinement in the literary process. The result is the differentiation of a specialized literary group from the main stream of the activities of a culture. Such a group tends to become intellectually ingrown and to narrow the field of its exposures. Euphuism and Gongorism, the schools of Donne and of Rimbaud, the barriers within which Joyce or the Sitwells or Gertrude Stein enclose their incommunicable symbols, are end products of the introversion that is implicit in every stage of the building of a literature. Here as elsewhere in the culture process the inner impulsions of a specialized discipline must be reconciled with the larger demands for growth and freshness.

Literature thus faces continually the need for rebarbarization. In terms of the response to that need many of the excursions into new regions of experience take on meaning. The most persistent of these has been the recurring cult of the folk and the folk mind. The folk itself is rarely drawn into the ambit of literary expression, except indirectly through the frequently sentimentalized mediation of "literary" treatment. But it does find its expression orally in ballads, tales, heroic songs, fables, proverbs, gnomic sayings and legends. Whatever its origin, this folklore or folk literature grows by repetition and accretion and constitutes at any time the larger proportion of the verbal expression of a culture. In periods before the formation of a literary language, as in Russia's dark centuries before Lomonosov, and among groups cut off by economic subjection, isolation and illiteracy from individualized literary

expression, as with the peasant populations of Europe and the American Negroes and hill folk, the folk literature is the only literature. Because such folk expression appears to rise straight from a deeply rooted experience and because it appears to be the product not of a single great individual talent but of successive generations living highly patterned and custom encrusted lives, writers and critics have found in it a vigor, an immediacy and a refreshing sincerity that they have commonly found wanting in the "literary" literature. Since the mediaevalist movement of the eighteenth century this admiration of the folk mind has played a large part in critical thought and in literary expression. That Goethe and Grimm expressed great admiration for the Yugoslav folk ballads was as characteristic of their day as the contemporary American interest in Negro spirituals. In fact many have found in the folk mind the source not only of the folk literature but ultimately of all literature. In the wake of the romantics nineteenth century literary theory held that the literature of mediaeval Europe was not the result of individual creation but was forged in the rich life processes of the mediaeval folk. This is now radically questioned, and the acceptance of Bedier's researches on the origins of the *chansons de geste* would indicate a tendency, at least in the case of the more sustained literary works attributed to the folk mind, to emphasize the creative role of particular individuals in gathering and fusing into an individualized expression what must in the beginning undoubtedly have been traditional folk material.

It is not difficult to find in the intellectual stream since the early eighteenth century the currents which have produced the emphasis on the folk mind. The cult of nature which found expression in the Lake poets as well as in Rousseau and the *philosophes*; the differentiation between the simple sincerity of the rural mind as contrasted with the civilization-contaminated life of the cities; the construction of a "noble savage" whose idyllic happiness flows from his obedience to "nature's simple plan"; the discovery by nineteenth century anthropologists of primitive civilizations, whose tightly knit cultural integrity lay in the dominance of custom and the supposed subordination of the individual to the group, and the idealization of the European peasant by intellectual and literary groups as far removed as Tolstoy and the Russian *narodniki*, Hamsun and the earlier Ibanez

—these were not so much the forces behind the folk cult in literature as themselves a related expression of deeper lying social forces. A function of rebarbarization similar to that which contact with the folk spirit has performed for the literary mind has been performed also by cults of the heroic, from the eddas and the Homeric heroes and the Prometheus legend to the Napoleon pattern in European literature and the superman philosophies of Carlyle, Emerson and Nietzsche. More recently a new primitivism has arisen, largely under the stimulus of anthropological researches into primitive art and sex life and imperialistic contacts with primitive groups, and constituting something of a literary Gauguinism. In another realm of experience many writers, following in the wake of the Freudian researches, have plunged into the jungle of the submerged and repressed sexual impulses; or have, like D. H. Lawrence in *Lady Chatterley's Lover* and James Joyce in *Ulysses*, broken down the tabus that, through moral codes and through the more directly institutionalized forms of censorship, have in the western Christian civilizations hedged about the exploration by literature of the physical sexual experience. All these literary allegiances—to the folk mind, to the hero cult, to the primitive mode of life, to preoccupation with sex activity—spring in common from the continually felt need for the rebarbarization of a literature in which the experience represented is continually threatening to grow thin. But they differ from the large movements which brought the experience of the middle class, the proletariat and women within the range of literary expression; they do not represent on the part of the writers a direct exposure to new areas of experience. They are derivative and vicarious. They have been as much escapes from experience as accessions of it.

Before a developed technique emerges in any literature even the best of individual achievement is but random expression, and whatever progress it has made in charting experience may at any time slip away again. In this sense the accumulated technology of literature—what may be called, in paraphrase of Veblen, the state of the literary arts—becomes part of the social heritage. All literary technique is concerned in some way with the manipulation of words and word patterns. The word, with its sound values and its emotional connotations, is the basic constituent of the technical apparatus, just as experience is the material to which it is

applied. Language may thus be regarded as implementing literature, and, as Boileau emphasized, the richness and flexibility of a language will often condition the potentialities for greatness in the literature which is linked to it. The crude stage of the Roman language, as reflecting the undeveloped culture of Rome, at the period when Ennius first attempted to force it into the complicated literary molds of Greece, accounts in no small part for that lack of *ars* with which the more flexible Augustans taxed him. The emergence of literary expression in the vulgar tongues of the Romanic nations had to wait upon the slow process of linguistic evolution in which the competing languages attained at least a rudimentary balance. The advance represented by the *Pléiade* in France and the Elizabethans in England is incomprehensible without an understanding of the immediately preceding or accompanying climax in linguistic development. Much of comparative literary criticism has concerned itself with such contrasts of the basic linguistic materials and their effect upon literary expression. But on the whole it is probable that most of what seems thus in the nature of linguistic differences may be referred back to differences in the texture of the culture. For while it is conceivable that words should serve only as quasi-mathematical symbols of communication and that whatever emotional values they ultimately contain should derive from their technical handling and their literary patterning, it is actually true that the words themselves come already laden with pleasure values and with connotations out of the culture. It is upon this substructure of connotation that the literary artist builds his superstructure of emotional values; and he often finds that because the words that he uses are already emotionally tinged they are not bare obedient instruments of his will but living things whose accretions from the culture are hostile to his purposes. Language may thus be as much an obstacle as an aid to literary expression.

The literary technician arranges his language in word patterns, aiming thereby to achieve patterns of sound and thought which are emotionally evocative. Rhyme, rhythm and assonance belong in the first category; imagery and idea in the second. These technical elements may be combined into further patterns, as in the sonnet, the ballad, the classical oration or the epic poem. These larger patterns may vary from a more or less rigidly determined mold,

such as the sonnet, to the larger literary types or genres, such as the drama or the novel. As technological forms these elements are products of a process of invention and development which must have involved a succession of individual experiments and adaptations, each building on the level previously reached. Brunetière placed a good deal of hope in a natural history of literary forms and styles, but the suggestiveness of his prologomena was never fulfilled by the results of his research. With few exceptions the origins are lost in the mist of history, and the developments upon them proceed by almost imperceptible gradations or, obscured in the creative process, elude all attempts at isolating them. The origins of the early clusters of nature legends, which may be found in very similar forms in Egypt, Babylonia, India, Judaea, Greece and the Celtic and Teutonic tribes, their relation to each other and the method by which they reached their historical distribution are still extremely controversial. With the epic there emerged a highly developed literary form, which winnowed and re-sorted the ballad clusters that had grown up about the myth legend content. But the processes by which these ballad clusters were forged into the formal epics are only dimly charted, as is also the transition from the dithyramb to the tragedy and from the village satiric songs to the comedy. With advancing research the origins of the novel and the short story are being continually pushed back to a remoter antiquity.

All literature which is of any value is of course invention; but the fashioning of new literary forms and genres involves a special sort of invention which bears somewhat the same relation to the creative process that invention in the industrial arts bears to the economic arts. But there is a greater inertia in the literary process: there is not the same pressure which capital accumulation and economic competition exert upon technological invention; nor is there the same rate of obsolescence which technical advance forces upon industrialists. But the sharpest difference lies in the fact that every literary form becomes a vested interest. The prestige of the tried pattern tends to deflect the craftsmanship of each writer from the search for new forms to the extraction of all the implications that the existing ones hold. The operative considerations are aesthetic rather than utilitarian, and the continuous need for effecting functional readjustments to a developing, larger situation is not as apparent in literature as in

economics. In fact aesthetic and sentimental considerations often induce a reversion to archaic forms.

But while such a functional adjustment is not apparent in the immediate sequence of experimental changes in literature, it would be dangerous to conclude that it was not operative in the larger areas of change. In fact the great importance of the study of the genre in literary history lies in the relation which it bears to the cultural compulsions of the period. These compulsions do not operate unswervingly and equally on individual writers: there is the obvious fact that every period shows so great a divergence of literary expression that there is often a greater affinity between two writers of different periods than between two of the same period. To that extent there is an element of significance in Lytton Strachey's remark that Pindar could have written under the Georges and Keats on the eve of Marathon. And in any period the process of literary experiment consists obviously of numberless innovations varying from tentatives toward a slightly changed form to heroic attempts at transforming an entire genre—each of these experiments responding to complex personal and often erratic motivations. The effect of the social forces of the period in determining the literary form is not a direct and unilinear one: it is selective. From the array of potential variations certain ones are over a period of time selected for survival. And the criteria of selection lie in the changing experience of the time. Changes in social structure and in ideological currents bring new experience, and this experience refuses to be crowded into the old forms. They are no longer adequate to express it. And the new literary forms that emerge out of the survival and persistence of certain experimental changes and the lapsing of others may be said to be functionally related to the new experience.

For example, the intensification of cleavages between social classes which tends to accompany a period of urbanization may result in the emergence of new forms or the reemergence of forms long neglected. The social realignments and tensions of seventh and sixth century Greece, which shattered the older tribal homogeneity, ushered in on the one hand a new and flexible type of personalized lyrical poetry, represented by Alcaeus, Sappho and Anacreon, and on the other the naturalistic satiric poems of Archilochus and Simonides of Amorgos. The further growth of the city-states stimulated the devel-

opment of two new literary forms, the choral odes and the drama, both more adapted to the amusement and edification of the urban collectivities. The growing importance of urban life in the modern period, typified most strikingly in the activities of the Spanish towns, found its reflection in the picaresque novels portraying the urban sharpers who awaited their guileless victims from the country. The popularity of this genre in its French and English forms created a demand among the growing urban middle classes of these countries for a more wholesome use of the prose narrative technique. Thus the rise of the homely novel of sentiment and chastity, which became the hallmark of subsequent bourgeois culture, is best considered against the accompanying economic transformation rather than as a revival of the abstract novel form, which may be traced to the Hellenistic romances, or by the more archaeologically minded to Egyptian prototypes.

So closely is the literary form tied to the culture out of which it has grown that when another culture attempts to take it over there is a tendency toward a transfer of the ideological patterns of the older culture. Vergil, in an age which stood heir to the concepts generated in the long period of intellectual quest and spiritual restlessness that had intervened since Homer, attempted nevertheless to think of his hero and his problems after the patterns and in the atmosphere of the Homeric heroes. The mediaeval fame of Vergil in its turn deflected Dante's portrayal of the Middle Ages; although drawing upon the ethos of its own age the *Divina commedia* strikingly reflected, often unconsciously, the pre-Christian world. Tasso was led by his love for older models to stray from the narrow path of sixteenth century Catholicism, and the Puritan hatred of Satan was curiously transformed in Milton. The unsuccessful attempts of Chapelain, Mesnardière and the literary intimates of Richelieu to forge an epic worthy of the new dignity of France illustrate how futile may be the transplanting to an uncongenial soil of a form which flourished in the soil of its own culture. The epic machinery, which had been fashioned in anthropomorphic polytheism, collapsed when placed in a Protestant setting, as is indicated by the offense caused to Dr. Johnson's religious sensibilities by Milton's familiarity with God.

If the forms and genres of literature respond to the social compulsions of a period, the responsiveness of theme is even more striking.

There are of course permanent human themes that run through the literatures of all cultures, but in each cultural situation the basic theme is clothed in a new form. This may be illustrated by the varied treatment accorded the theme of love. As Marx recognized, the sexual instinct is universal, but the forms of marriage and courtship vary with the underlying economic relationships. While not a few of the variations in the conception of love—at least as they are reflected in literature—seem adventitious, the relationship is generally clear. Infidelity, the recurring tragic theme of the ballad stage of society, becomes the spice of Restoration comedy. The love of the flesh, sublimated by the scholastic poets of the Middle Ages into love of God, remained to haunt the less unified generation of Petrarch and to delight the lusty burghers immortalized by Boccaccio. The mistress worshipped at a distance by the platonic troubadour in the last stages of feudal society was displaced by the insatiable Wife of Bath.

But the outburst in the fourteenth and fifteenth centuries of antifeudal satires and fabliaux which attempted to reveal the true character of woman in all its designing ramifications could not permanently supplant the tendency to sentimentalize the weaker sex. When the descendants of the insurgent burghers of those centuries became in their turn the entrenched middle class of the eighteenth and nineteenth, the genteel tradition of chivalry and sentimental love received a new impetus. It is significant, however, as a reflection of changing class ideals that the sentimental literature of the later period was intensely preoccupied with the institution of marriage and with the economic advantages of a successful marriage. Among certain of the romantic poets there is revealed a tendency to regard the woman as an intellectual equal, and with the growing social and economic emancipation of woman the modern novel is stressing the desirability of sexual as well as intellectual equality.

One of the crucial facts about a writer is his kit of values. This is recognized in criticism, where writers are characterized and classified in terms of their affiliation with one or another of a group of schools or literary philosophies, such as classicist, romanticist, realist, humanist, naturalist. These philosophies determine what they shall select for treatment and from what viewpoint they shall treat it. They represent the handle by which the writer grasps reality.

But they are not only instruments in the creative process; they are also embodied in the critical method of an age, serving to canalize the creative stream. They arise in response to social change. A comprehensive change in the social structures may call for a reformulation or reorientation of the prevalent conception of life. This is accomplished in a systematic fashion by the philosophers and through an imaginative and emotional projection by the artists and writers. The connections between the two groups may often be distinctly traced, as in the cases of Euripides and Socrates, Lucretius and Epicurus, Boileau and Descartes, the Schlegels and Schelling, Zola and Comte. The direction of influence is generally from the philosopher to the writer, but the influence is not necessarily one-sided; in reality both formulations may be followed back to the same source.

Conceivably any *ism* can constitute such a philosophy for an author. Any issue that has been long wrangled over may attain the dignity of a school and then of a movement, and after being fought for tenaciously may end by organizing literary expression. Actually there have tended to be certain relatively stable points of view that have served this purpose. Whether these points of view are permanent aspects of human thought, as has been claimed for classicism and romanticism, is very doubtful. Such a division of the field normally involves a straining and extension of each term, so that it becomes practically meaningless. But it must be admitted that there are discernible throughout literary history certain poles between which literary expression has oscillated. The power attributed to the gods and the invisible forces guiding human life measures man's estimate of the limitations of his own power. The sense of human power and self-sufficiency shown in the *Iliad* or the eddas, where the gods are symbols of the superhuman courage of the warrior, has never proved lasting. Homer is followed by Hesiod and the Eleusinian mysteries, *Beowulf* and the *Battle of Maldon* by *Sir Gawayne and the Green Knight*. The anthropomorphic is engulfed by the animistic, by a folklore of magic and witches and monsters. Instances could be multiplied from the ancient and mediaeval literatures of recurring cycles of humanism and supernaturalism. But even in those literatures the antithesis is oversimplified. And by the time of the Renaissance, in which so many historical traditions and fresh social forces converged and cultural boundaries were broken

down, the idea of polarity is no longer useful. In the heightened confusion each writer had to find or fashion for himself an artistic credo to serve as a center of stability. And if this credo narrowed his imaginative scope or distorted his vision of reality, it was only a hazard that has to be run in every imposition of a more or less formal philosophy upon an artistic process.

But every writer has not one but two philosophies—his more or less conscious artistic credo and, lying deeper than that, his often unconscious vision of life and scheme of values. The first is the rhetoric of his writing; the second its logic. Through the first he is assimilated to some "school" within the craft; the second fixes him in the setting of his larger world—his place in the social structure, his economic position, his orientation toward the vital issues of the day, his responsiveness to the contemporary aspirations and realities. In a writer such as a social *Weltanschauung* is likely to lie not on or near the surface but out of sight, where it is the more deeply embedded and the more difficult to quarry.

This more basic philosophy involves the relation of literature to the totality of society. But society is in this case too inclusive a term to be useful in analysis. It must be split up into elements which fall, to start with, into two main groups—those relating to social organization and those relating to ideology. In the first group may be placed technology, economic activity, the organization of the state, the structure of classes, social relations of dependence and domination, the important institutions and the distribution of power; in the second intellectual temper, emotional tone, ethical and religious conceptions, aesthetic achievements. The Marxist approach subordinates the second group to the first, making of it a superstructure (*Überbau*) which rests on the first as foundation. It is truer to say, if the inquiry is into the forces exerting an active influence on literature, that it is responsive to the whole of society, including not only the social organization but also the ideological structure, of which literature is itself a part. And it is responsive to the whole of society seen not structurally but dynamically, so that at any time it is only the elements that have been projected by change and conflict into the arena of operative forces that need to be considered.

Literature will be thus most responsive to the dynamic of a society in transition. Social

change is going on at all times in all social orders: there is no stationary state. But the sense of it and the compulsions it sets in motion vary in intensity just as change itself varies in pace. When the pace becomes sufficiently great so that it no longer represents merely variation within a social system but a sequence looking to its breakdown, the result is a transition society. By its very nature the period of transition has in it elements at once of disintegration and construction. It does not start until something that was a unity begins to break down; it does not end until something new that is a unity has been achieved. Between those termini the sense of wrack or the vision of construction, the stress of conflict, the emergence of order, leave a deep impress on experience. But it is a fevered impress, lacking the strength and firm dignity that arise out of an integrated culture. Routh points out that the *Iliad* shows the marks of having been written in a society that was a unity, the *Odyssey* for a conquered race in a society that had crumbled before the Dorian invasion. Petrarch wrote in an Italy whose Dantean unity—an ideological unity, not political or economic—was breaking up. Shakespeare wrote when Elizabethan unity was in the forging, with the moving vision of the emergence of a new collectivity—English nationality—before him; the metaphysical poets, descending the arc, wrote in the break up of the Elizabethan unity. There is in both the Elizabethans and the metaphysicals the feverish tone of a transition literature; in both a preoccupation with death; but while in the Elizabethans death was the great tragedy, it held for the metaphysicals a strange fascination. In the post-war disintegrative period of modern capitalist society, with the strong focusing of its contradictions, has come again an interest in death, represented strikingly by Thomas Mann and Robinson Jeffers; the one looking upon it as the soil out of which art and beauty spring, the other looking upon it as the final breaking through to reality—the only escape from the body of this life.

In the entire complex of forces making up a society the economic organization, and especially the class structure, have quite generally, under Marxian influence, been singled out as determining the form and the idea patterns of literature. Translating this into terms of a changing society it has been the dynamic of the class structure—the class struggle—that has been thus singled out. The assumption that this has

always affected literature directly is used only by the less critical thinkers of the school; the more considered position is that it attains its effects as a selective process and generally through the mediation of the ideological elements in society. The impact of society on literature lies in the dynamic convergence of both sets of factors—social organization and ideology—each influencing and influenced by the other. The richest body of material that has yet been uncovered for the study of this complex relationship lies in the history of the periods of economic transition in various cultures from the tribal social organization to the feudal, from the feudal to that of petty trade and industry and from that to capitalism. In the history of the capitalist social system the significant relationship is that between capitalistic enterprise, individualist thought and the romantic strain in literature. The present period, which is considered by Marxians to be a transition period representing the disintegration of capitalism, is being widely analyzed from this general point of view.

The processes by which literature has responded to the operative social forces are the ordinary processes associated with the life of institutions. Innovations and tradition, insurgency and the vesting of interests, cultural borrowing and native growth, the carry over of intellectual patterns, the compulsive power of myth—these processes, found throughout the cultural fabric, have also left their mark on literature, adding their purposes and rationale to its own. But literature is also an active instrument: through its evocative power it molds behavior, carries over the propaganda, conscious or unconscious, of its intellectual setting, plays its part in building and breaking social movements and creates beauty values to invest an old order or sanction a new.

The withdrawal of Gautier and the Parnassians from the daily preoccupations of men indicates the first serious disintegration of an age old convention regarding the position of the author in the social group. When language was first being forged through a process of isolating tonal and sound symbols for emotional experience, the creator of new words and new verbal rhythms experimented in the presence of his fellow tribesmen, gauging the success or failure of his experiments by the response of the listeners. Similarly the welding of discrete verbal clusters into sustained conceptual patterns, such

as riddles, charms and proverbs, was an organic development conditioned by the immediate interplay between the collectivity and the verbal-rhythmic craftsman, irrespective of whether he had acquired a specialized status as medicine man or priest or was still an impromptu entertainer and exhorter. In such a literature anonymity was the prevailing convention, since the emotional or religious value of the words rested upon their authority as expressions of the collectivity rather than as the personal creations of an individual.

Between this crude, more or less spontaneous literature, concerned primarily with the bewilderment of primitive man in the presence of the mysterious and hostile forces of nature, and the fully matured self-confidence of the anthropocentric epic lies a nebulous period of tribal development. At the end of the transformation emerged the clearly individualized figure of the tribal chieftain, around whose person revolved the major currents of tribal activity, political, military and cultural. Increasingly aware of his distinctive position in the tribe, he found a useful agent in the person of the literary craftsman, who had likewise come to occupy a more specialized status in the group.

Although it is no longer believed that the Homeric cycle was transmitted orally from one generation of bards to the next, the actual rendition in the court of the chieftain took the form of a recital accompanied by music and usually interspersed with formal, rhythmic dancing. At such a stage of literary development there was no clearly drawn distinction between the creative craftsman and the reciter who might graft on to an inherited body of literature a few embellishments of his own. Through such interpolations the Sanskrit epic cycle grew in the process of transmission to even larger proportions than did the original nucleus of the *Iliad* or *Odyssey*. The concepts of originality and plagiarism were the offspring of a much later, individualistic age. Even in mediaeval Europe the distinction which has sometimes been drawn between the troubadour who created the poem and the jongleur who publicly recited it is somewhat of an abstraction, since the troubadour was often forced by exigencies of fortune to publicize his wares in person, while, on the other hand, the jongleur often introduced into his recitation a not inconsiderable amount of his own handiwork.

The essentials of the relationship between the heroic chieftain eager for personal or family

glory and the craftsman who could clothe these yearnings in a beguiling rhythm of sounds and emotions are discernible in the varied disguises which this relationship took throughout antiquity and the mediaeval period. The element of direct, personal contact may be illustrated not only by the Homeric bards but by the recitations of the Sanskrit *sūta*, the Anglo-Saxon *scop*, the Scandinavian *scald*, the Icelandic *sagamann* and the Celtic *file*. In each of these settings the economic and social position of the bard was intricately bound up with that of the tribal chieftain. It is no coincidence that in Anglo-Saxon poetry the epithet for king is "gold giver," or that the thematic rhythm of many of the early heroic poems was dictated in no small part by considerations of how best to stimulate the tribal chieftain to a pitch of magnanimity wherein he would part with a maximum of gold bracelets and gold rings.

The regime of the tribal chieftain may give way, as it did in Egypt, Babylonia, India and China, to a centralized imperial bureaucracy; or, as it did in Greece, to a group of urban autarchies, at first tyrannic and later democratic. In the former case the literary craftsman becomes a rather indistinguishable element of the public cultural institutions, being assimilated either into the entourage of the court, as in China, or into the religious and commercial oligarchy of Babylonia and Assyria or into the priestly and scholarly circles of Egypt. The more individualistic role of the poet in seventh and sixth century Greece is a reflection in a different sense of the disintegration of the older tribal values of heroism and self-sufficiency. In a period of spiritual disillusionment, growing class antagonisms and political insecurity the literary craftsman was called upon to soothe the minds of troubled tyrants. The bibulous, aphrodisiac lyrics strummed out by Anacreon of Teos at the banquets of Polycrates, tyrant of Samos, are an example of escapism, comparable to the songs of Alcaeus and Sappho in strife ridden Mytilene. When toward the end of this long period of transition between the Achæan and Athenian civilizations the constitutional oligarchs were replacing the tyrants, Pindar served the aristocratic cause more intelligently by bringing the beauties of poetry from the banquet hall to athletic celebrations and civic ceremonies less remote from the restless populace.

The popularization of the Pindaric ode and the transformation of the rural dithyramb into

the drama paved the way for a literary form still better adapted to the amusement and edification of the democratic citizenry of Athens. Under Pericles the role of the literary craftsman underwent a significant modification. The outstanding dramatists, regarding themselves primarily as public spirited citizens, whether on the battlefield, on diplomatic mission or in the theater, preferred civic acclaim, as expressed in the decisions of the popularly elected judges, to pecuniary reward. Since the dramatic medium had introduced a new element of expense, namely, the training of the chorus and actors and the scenic staging of the play, the wealthier classes assumed this indirect form of patronage, while the citizenry itself sometimes contributed sums of money to the writers. Even after the collapse of the proud spirited collectivity in the early fourth century, there is only scattered evidence of a return to the systems of patronage characterizing the ages of Homer and the tyrants. The later Hellenistic empire, reaching its highest level in the Alexandrian culture, is comparable rather to the early bureaucratic type of state; in both the literary craftsman is essentially a public functionary, who, like Callimachus, may combine his delicate, amorous verse making with graver responsibilities as supervisor of the museum. There may be found, however, one practise reminiscent of earlier systems of patronage—namely, the encouragement offered by new centers of culture such as Ephesus and Pergamum to literary craftsmen who were publicizing the legends of the locality.

The infiltration of Hellenistic culture into Rome may be attributed primarily to the material encouragement given by Roman aristocrats of the type of Scipio Africanus to the early exponents of Greek literature, such as Livius Andronicus and Ennius. The utilitarian values of a highly developed literature as a training school for the Forum and as a source of distinctive class culture insured adequate support to the early teachers and practitioners of literature; and despite the violent opposition of the less privileged classes in Rome and the rural aristocracy Greek literature had by the time of Cicero become firmly established. A native literature was still, however, to be forged. With the school of Roman poets which flourished under Augustus the relationship of the literary craftsman to the ruler enters upon a new phase. While Augustus may be said to have been like the more primitive chieftain in his desire for glory or like some of the Greek tyrants in seek-

ing to divert the populace from brooding on lost liberties, his delegation of the literary dictatorship to a person of the type of Maecenas was an innovation. It created a closely knit literary circle, conscious of a homogeneity of mutually stimulating aesthetic ideals which enabled the writers to overlook rather easily the more workaday realities of the patron-client relationship. The active critical judgment of Maecenas, like that of Pope Leo x in Renaissance Rome or of Lorenzo de' Medici in Florence, was a determining influence on the work of the literary craftsman in quite a different sense from that exerted by the Anglo-Saxon chieftains assembled in the beer hall or of the Dorian and Ionian tyrants reclining at their banquets. With the passing of Maecenas and the Augustan literary circle and the rise of a parvenu class of rentiers and *fermiers*, eager to vest itself with the paraphernalia of literary culture, the more disagreeable features of the patron-client relationship became increasingly evident. The gibes of Martial and Juvenal at the poetasters who glutted the client market and at the insensitive, calculating patrons who hoped to buy at not too great outlay the immortality promised by poets are prophetic of a later age.

The main features of the evolution of Roman patronage are repeated in Renaissance Italy and early seventeenth century France. The desire of the fainéant nobility for immortality brought an increasing number of writers to the aristocratic and papal courts to haggle over the price of a literary commission. Despite their fulsome dedications the Elizabethans managed to escape this menial attitude, thanks in large part to the fact that many of the leading writers enjoyed a source of revenue from the booming theaters but also to the more intelligent interest of the English commercial nobility, which in addition to lending the prestige of its name often, as in the case of Spenser, secured congenial sinecures for the more promising poets. The easy familiarity characterizing the relation between writers and patrons in the neo-Augustan age of Dryden and Pope and the mutually stimulating contacts of the literary circle and the political aristocracy were paralleled not only in the group around Maecenas but also the French literary group dominated by Boileau and accorded for a time official state support by Colbert. But with the rise to power of the "barons of the bags" under Walpole and among the bankers of Paris, the atmosphere of sincere and

intelligent appreciation characterizing these literary circles was lost. The thunderings of Johnson in England and d'Alembert in France against the abuses of patronage mark the end of a literary institution which was being undermined by deeper economic currents than either assailant suspected.

Hitherto the literary craftsman had exercised an unmistakable function in the social process; he was an integral unit in the life of the leisure class, most at home in the highest political and intellectual circles. He had dramatized Socratic individualism; rationalized the Caesarism of Julius and Augustus; fired the spirits of the legions of William the Conqueror at Hastings; associated on terms of the closest intimacy with the sons of Frederick Barbarossa; followed the troubadour king, Richard Coeur de Lion, to the crusades; adorned the metaphysics of Thomas Aquinas; filled the Florentine populace with an unreasoning enthusiasm for Lorenzo de' Medici and the restless masses of London with love for the Virgin Queen. In the Sicilian court of the most idealistic and cultured of the Holy Roman emperors he had led the life of a highly prized bureaucrat, whose function it was to perfect new literary forms, such as the sonnet, more adapted to the rhythms of the popular tongue of modern man; at the courts of Marie de Champagne and Eleanor of Poitou he had sentimentalized a disintegrating feudal order and in an age of domineering women and crusading husbands evolved a ritual of love which elevated the lady of the manor to the level which befitted her; in the Wartburg castle of Count Hermann of Thuringia, the most illustrious and intelligent of the German mediaeval patrons, he had fired the spirit of Germanic chivalry.

During all this earlier period the literary craftsman proper, like the leisure class of which he was an integral part, was not deeply involved in the emotional life of the productive masses. To be sure, theatrical art, being by its nature more popular, had directed its appeal to a wider group. But genuine theatrical activity had been confined to a few periods—either periods of democratic enthusiasm, as at Athens, or of an incipient, untutored culture, as in early Rome; or periods marking the emergence of an unlettered class, such as the guild burghers of fourteenth and fifteenth century France. The non-theatrical craftsman, with a few negligible exceptions, such as the popular feuilletonists in Alexandria or the minstrels of the populace in India or the *Spielmann* in mediaeval Ger-

many, was the product and mouthpiece of a leisure class, which filled its earthly span with religion, warfare, politics, learning and love. The crumbs of literature which fell from its table to the productive masses went unnoticed.

By the time of Dr. Johnson and d'Alembert the older economic relationships had undergone a deep transformation: the full effects of the commercial revolution were already felt, and before their deaths the industrial revolution was gradually beginning to gain momentum. The happy experience of Addison and Steele with the *Spectator* and the *Tatler* and of Edward Cave with the *Gentleman's Magazine* had proved to the satisfaction of even the most skeptical eighteenth century book publishers that there was a reading public eager for congenial literature. Under the stimulus of the popular revivalist movements, such as Wesleyanism, and of the insistence of democratic utilitarianism on popular education, a progressively larger section of the productive masses was drawn into the literary process. At the same time the dominant groups within the new nation states became involved in an increasingly complex economic system, which computed its values in terms of price.

The effect of these basic economic forces on the literary craftsman was twofold. The dominant social groups, absorbed in their daily responsibilities in the system of entrepreneurship, found little place in their immediate circle for the man of letters. Deprived thus of his vital contacts with the dynamic elements in the social process no less than of his leisure status, he turned either in a spirit of resignation to the fainéant remnants of a precapitalistic age or, if of a more realistic temperament, set out to orient himself more accurately in terms of the various levels represented by the enlarged reading public.

Although he had assumed a professional status on the periphery of the price system the author's sense of immediate contact with the other members of his profession decreased. The small literary circle of Augustan poets and critics was a self-contained, exclusive unit. Critical standards, based on intricate rules of composition and presupposing an intimate familiarity with the rather inaccessible texts of earlier masterpieces, closed the gates in the face of the overpresumptuous. The Horatian idealization of the poet as a civilizer, a being apart, akin to Cadmus, was perpetuated throughout the Renaissance and served even later to discourage

the vulgar interloper. With the gradual release of individualism accompanying the break up of feudalism the task of the critical oligarchs became increasingly difficult, as can be gauged by the vehemence of Boileau and Dryden and Pope against the fumbling hangers on in the republic of letters. With each new stage in the spread of individualism the impossibility of the task became more manifest. The declining appeal of ecclesiastical and military careerism sent a growing number of recruits into literature, ill adjusted to their social system but unfitted also for their new profession. At the same time the implications of the newly proclaimed doctrine of the "career open to talents" were drawn by an ever mounting number of ambitious and penniless youths. With no organic group center around which to cluster writers followed the general drift to the cities, where they broke up into artificial groups bound together by the miseries of Grub Street or at a later date by the Bohemian atmosphere of the Parnasse cénacles.

The proliferation of literary and intellectual groups was accompanied by an unprecedented demand for printed edification and amusement. The older public ceremonies which hitherto had beguiled and as a rule edified the populace—religious rituals on the Acropolis and at Chartres, gladiatorial contests and circuses, festas and endless saints' days, mimes and miracle plays, tournaments and bear fights—were fast giving way to the industrious drabness of Manchester. While the middle class turned in ever increasing numbers to the mirror of literature in search of an idealized reflection of its virtues and ambitions, those in the smoky tenements sought in literature only a brief opiate from the day's drudgery. The majority of modern writers, like the majority of modern readers, have been drawn from the contented middle class. Through the medium of the novel author and reader, turning from kings and nobles, have peered into the everyday lives of their neighbors, gazed upon the pleasant face of nature, shared their ideals of love and earthly fame, discussed their problems of love and marriage. The success of the early novelists, notably Richardson and Jane Austen, soon established a mold which has required but little modification in its adaptation to the demands of large scale literary production. To the more determined of the standardized profession of letters have been accorded wealth and veneration, and to the less talented at least their daily bread.

The escape from this prevailing preoccupation with homely matters has been furnished by the literature of adventure and illicit romance, which lightens the drudgery looming in the shadow of Manchesterism. The children of those toilers who at an earlier stage found diversion and comfort in the exploits of Jacob and Gideon turned to the new supplies of adventure distilled from the lusts and crimes of an industrialized society or the lawless adventure of a frontier in process of exploitation. Reynold's penny romances of the 1830's, the paper covered volumes of Nick Carter and Jesse James, the pulp magazines of the subway age, have brought flashes of release to the millions who have preferred to forget their own lives.

Like the submerged group of readers, a small literary layer much nearer the apex of the social pyramid has sought escape in a variety of ways from middle class standardization. Shelley, Matthew Arnold, Flaubert, Ibsen, Shaw, the latest group of formalists—all these and many more have reviled the standards of Philistinism and of Philistine literature. The romantics sought escape in a neo-Prometheanism or mediaevalism or pantheism or revolutionary oratory; the Parnassians sought it in the religious literature of India and Persia and early Greece; the de Goncourts and their maladjusted French and English followers in the literature and art of the Orient; the symbolists in the nebulous melopoeia of delicate, half formed images; the formalists in the ferreting out of new verbal masses and rhythmical patterns; the transitionists by blasting the word itself.

This upper group has in the nature of things been the most articulate in rationalizing its pretensions and predilections. The modern conception of literature may be said to be in large part its handiwork. It has been openly suspicious of literary mass production and amused by the lower reaches of literary output. Against the modern traffic in books it has sought to set up standards based on literary tradition or aesthetic rationalism. Unconvinced by the utilitarian argument from numbers, it denies that "pushpin is as good as poetry" and measures its audience in terms of centuries rather than publisher's sales. The attempt of this self-conscious group to leaven the inert mass of functional readers by familiarizing them with laws of taste of a less ad hoc nature has not materialized. The dogmatic assurance of "Augustan" criticism, buttressed by the prestige of

a functioning social group, finds in the modern period a few nostalgic exponents, but ex cathedra judgments, even of a Brunetière or an Eliot, have only a limited carrying power. For among the inalienable natural rights of the modern individual is that of knowing what he likes. The attempt of the impressionist critics to tell him why he likes it or why he should like something else more seemed for a time, in the hands of an Addison or a Hazlitt, to give promise of elevating the public taste. But the unpretentious, conversational tone of the impressionist critic soon came itself to be commercialized and vulgarized. The growing lists of the publishers on the one hand and the growing numbers of those who want to write on the other have resulted in the tremendous expansion of the group of literary intermediaries known as book reviewers. Ranging from esoteric literary reviews to boiler plate columns and to rural weeklies, the realm of criticism has come to display as violent cleavages as are found in the reading public and among the authors who try to anticipate its tastes. In an age of blurbs, literary teas, book clubs and Christmas trade publicity the critic's impressions of the adventures of his soul among masterpieces tend to gather irrelevant values; while the lamentations of the minority which still persists in thinking of the intrinsic values of literature grow proportionately fainter.

The dual problem of sociological criticism—the social conditioning of literary creation and the impact of literature on society—has received varying emphasis and neglect in the long history of critical exploration. Greek criticism was cut off from any real consideration of the creative process, either in social or psychological terms, by reason of its contempt for any non-Greek variant and its tendency to take its own body of literature for granted. When Aristotle formulated his doctrine of mimesis, or the imitation of nature, the Greek masterpieces were already in existence. The rules of literary composition, set forth in the *Poetics* and the *Rhetoric* and repeated with minor variations by the long succession of Aristotelian critics, were at the outset arrived at in large part by an inductive process of analyzing existing models. But once arrived at they were universalized, and in the hands of an intelligent literary craftsman these axioms of composition were deemed adequate to convert the world of nature into the realm of art. The intricacies

and problems of the intermediate personal process were minimized and glossed over. The major energies were directed to a classification of types of literature and the differentiation between faults and merits in composition. The tendency to ignore the processes of personal creativeness was emphasized by the fact that Greek literature was collective in inspiration and traditional in form, and that since his material lay in the tribal tradition the poet was merely the craftsman molding it into literary form by well attested rules.

The influence of the Aristotelian approach lay over western critical thought for two thousand years. Some of the later Hellenistic aestheticians, notably Longinus and the neo-Platonists, stressed imagination in the creative process and revolted against the sovereignty of overformal rules. But although its importance was revived by modern thought, the movement was at best a minor insurgency. In Rome, where the task of the critic was bound up with the profession of the teachers of rhetoric, the rules of composition became increasingly meticulous. But they were oriented primarily toward preparation for the public career. In the hands of a critic who was himself a literary craftsman, like Horace, the rules were fashioned into an *ars poetica* in which the factor of *ingenium* was taken for granted and forthwith dismissed. Neither in Horace nor in the numerous Horatians of Renaissance Italy and seventeenth century France was there any sustained interest in any portion of the literary process except the end product. The new interpretation given to the Aristotelian mimesis by certain Renaissance critics, such as Vossius, according to which the masterpieces of antiquity took the place of nature as the proper object of imitation, left even less reason for concern with the complexities of the creative process. The Atheno-Roman logic of *barbaroi*, reenforced by the thrill of the classical revival and the consciousness of succession to the ancient tradition, enabled the sixteenth century Italian critic to generalize and prescribe with the assurance of old. This critical absolutism persisted even into seventeenth century France, which conscious of its intellectual hegemony in Europe was persuaded that the mantle of Rome had settled with providential fitness on its shoulders. The deeper lying drives, the cultural and intellectual forces at once stimulating and conditioning the task of writing, remained outside the realm of exploration.

But the second aspect of sociological criti-

cism—the impact of literature on society—was given rather extended attention. Plato wished to banish poetry utterly from the Republic because it could be intoxicating to its victims and interfere with the more serious pursuits of life. And without sharing Plato's passionate outburst against the poet the classical world agreed that literature had a marked social incidence. The poet was *morum doctor*, and the orthodox version of his social function is expressed in Horace's *delectando pariterque monendo*. The Achaean heroic type presented in Homer, combined with the more mature wisdom characterizing the gnomic poems of the Seven Sages, the odes of Pindar and the dramas of Sophocles, presented undoubtedly a pattern of self-reliance and moral restraint that may have been found useful to the stability of the Greek polities in periods of transition and disintegration; the hold that Euripides had on the imagination of the Hellenic world served something of the same function in the direction of political amity as Shakespeare is said to have served among English speaking countries; and the tory diatribes of Aristophanes against the individualism of Euripides as an important factor in the disintegration of the older tribalism are evidence of how the Greek mind was occupied with the social impact of literature. In other cultures similar instances may be cited—the attempt made in the *Bhagavadgita* to bolster the Indian caste system by propaganda stressing its justice and sanctity and directed to the farmer, the soldier, the shopkeeper; and Vergil's idealization of a farmer's life in a period of chaotic agrarian unsettlement as well as his intent to fashion a glorious heritage for an empire freshly welded out of dynastic struggle. The common element in most of these cases is the consciousness of the effectiveness of literature as a force making for order or revolt in a changing social organization or political system.

With the victory of Christianity a rigid moral and political instrumentalism—implicit, when it was not a conscious policy, in the new religious philosophy of life, and reacting against the decadence of Greco-Roman life in the empire—destroyed pagan literature where it could and placed its imprimatur only on what was edifying and expedient. The instrumentalism of an *ecclesia militans* was followed in due course by a diluted but oppressive moralism, finding its strongest expression in sixteenth century Catholicism and insurgent English Puritanism, which represented the extremes of moral revival

in the interests of religio-political struggle. And the endless harping on the moral beneficence of literature that is found in late Renaissance Italian criticism, along with the patient defense of literature by Sidney and the Elizabethan critics and by Congreve a century later, may be interpreted as a response to this pressure.

It is in eighteenth century critical thought that a distinct conception of the social conditioning of the literary process first emerges. The confluence of several appreciable forces, all working in the same direction, may serve as an explanation: the early environmentalism of the Renaissance and seventeenth century thinkers; the emergence of centralized nation states, building, and building upon, a feeling of nationality; the spread of literacy and literary effort; the growth of a middle class, emotionally bound to a native tongue and a native culture and skeptical of the fervor of the classical revival as embodying an aristocratic snobbishness. All these forces combined to produce a movement of literary criticism which threw its major emphasis on the organic unity of the national literature with the national culture. Wotton and Hume in England, Dubos and Condillac in France, Kant, Hamann and Herder in Germany, may be selected as exemplifying the variety of approaches to the problem. The movement took at first the form of a debate as to the relative merits of the "ancients" and the "moderns," and later the mediaevalist strain, represented in England by the writings of Hurd and the Wartons and in Germany by Gottsched's and Herder's continuation of an older mediaevalist strain, harked back to the glories of the national literary past. But neither the bitterness of the Battle of the Books nor the pressure to bolster the national pride against the Gallic pretensions to cultural hegemony is of primary significance: the chief importance of both lies in the fact that they suggested the outlines of a critical method which related the body of literature—of both a nation and a period—to the conditioning geographical, racial and political factors. From this followed the position, adumbrated in the Elizabethan period by Daniel's *Defence of Rhyme*, and given characteristic expression in Warburton's answer to Shaftesbury's criticism of Hebrew poetry: no literature, insisted Warburton, could be judged except as the critic placed himself in the position of the audience for which it was intended. The underlying assumption of this group was that a literature which had evolved organically out of

the matrix of a society held more possibilities of greatness for that society than did an alien importation.

This early insurgent environmentalism was developed more scientifically in the nineteenth century and became the prevailing conception of literature. It was used to good effect by the romanticists in their struggle to displace the classicist position. Chateaubriand's mediaevalism had had considerable contemporary influence; and Madame de Staël, who was conversant through Friedrich Schlegel with Herder's literary nationalism, published studies of the German temperament and literature in her *De la littérature considérée dans ses rapports avec les institutions sociales* (1800) and her *De l'Allemagne* (1813), which were received with acclaim and were widely imitated. Along with the even more brilliant outpourings of the creative romanticist poets and dramatists, they marked the overthrow of the long intrenched classical absolutism. Rousseau's dictum that the only absolute truth was that there was no absolute truth had by 1830 been transmuted into a generally accepted axiom. Romanticists such as Wordsworth and Hugo developed a critical interest in the creative process of the individual writer, for the study of which a path had been blazed by the sensationalist psychology of Locke, by the emphasis placed by Shaftesbury on the dynamic and emotional elements in the literary creative mind, by the speculations of Home in England and Baumgarten in Germany on the nature of the creative process—developed more systematically in Herder's analysis of *Idiotismus*—and by the vogue of individualism and sensibility ushered in by Sterne and Richardson. This interest, taking the form of the cult of the genius and emphasized to the exclusion of all other factors, combined eventually with the complete formalism of the "art for art" school. The environmentalist position, on the other hand, building on Darwinism and Comtism and on the sharpening of scientific method, was extended to a more precise analysis of the social forces conditioning literary creation. Its most characteristic expression is found in the famous trilogy of Taine, in which he classified the environmental influences under *race*, *milieu* and *moment*. Brunetière displays even more markedly the tendency of this later type of environmentalism to eventuate in a reassertion of superpersonal standards.

The emphasis of the scientific critics on broad environmental determinants and the preoccu-

pation of the more introspective of the romantic poets with the individual creative mind were accompanied by a third approach to the literary process. Although thoroughly conversant with the environmentalist position the democratic humanitarians and socialist utopians of 1830, reacting against the laissez faire indifference of the Benthamites, emphasized the role of literature in the task of fostering the spiritual and emotional welfare of the unprivileged masses. The sentimental humanitarianism which had begun in the eighteenth century and received a stimulus from the writings of a number of the romantic poets, as, for example, Shelley and the early Wordsworth, deeply colored the conception of literature voiced by Saint-Simon, Proudhon, Fourier and Comte in France, Kingsley and Ruskin in England and Bielinsky and Chernechevsky in Russia. This emphasis on the social role of the literary artist is essentially a perpetuation of the older classical and Renaissance attitude adapted to the social problems of an industrialized society.

In reaction against this exclusive concern with the civic functions of literature a group of younger writers headed by Gautier set out to shift the emphasis back to what it regarded as the essentials of literature. The various forms assumed by the art for art movement among the successors of Gautier, especially in France and England, sought to focus attention on the peculiar problems distinguishing the work of the literary craftsman from that of all other types of thinkers and writers. This led both to the cult of the genius and to formalism, which devoted itself exclusively to problems of literary technique. In both cases the pretensions of the scientific environmentalists to explain away literary masterpieces were repudiated. This anti-environmentalism has varied from the annoyance of Whistler to the reasoned skepticism of Pater and to Croce's emphasis on intuitive phantasy as the only genuine factor in the creative process.

Until recently these varying conceptions of literatures, which may be traced from Plato to Cocteau, have proceeded on the whole undisturbed by authoritarian intrusion. The victory of the Bolsheviks over the White armies in 1920 and the subsequent consolidation of the U.S.S.R. have brought the question of literature out of the realm of theoretical abstraction and converted intellectual polemics into revolutionary partisan warfare. As an insurgent movement Marxism directed its major efforts

to the overthrow of bourgeois society according to the scientific system laid down by Marx and elaborated by Engels. The necessity of propagating the cardinal doctrine of the class struggle had directed attention to the potentialities of the written word as a revolutionary weapon, but the question of the origins and function of literature in its higher ranges was not a pressing one. Dialectical materialism in laying out systematically the materialistic foundations of the ideological superstructure developed the environmentalist position with marked precision; but Marx himself did not attempt to apply its methodology overrigidly to the masterpieces of literature. A devoted reader of Aeschylus and Shakespeare, he also found relaxation in contemporary bourgeois literature, especially in the works of Balzac, which he intended to criticize at his first leisure. He felt no hesitancy in emphasizing, in the appendix to *The Critique of Political Economy*, that "certain periods of high development of art stand in no direct connection with the general development of society, nor with the material basis and skeleton structure of its organization." Later Marxian scholars, of the type of Labriola and Plekhanov, have also been inclined on the whole to emphasize that the dependence of literature and the arts on the underlying modes of production is less directly traceable than is the case with political and legal ideologies and institutions. Since even to the present day no systematic attempt has been made to subject the workings of the creative process itself to the methodology of dialectical materialism, the Marxian interpretation of literature has laid itself open to the same charge that Saint-Beuve brought against Taine's environmentalism—namely, that it tended to ignore the technical and psychological elements distinguishing the literary craftsman.

The October thrust to power basically altered the emphasis of Marxism; unlike Engels or Liebknecht, Lenin was confronted with the task of organizing a proletarian culture. Between the present and the ultimate goal of a classless society was to be a period of transition of indeterminate length. Unlike Trotzky, Lenin refused to conceive of this period as essentially a brief and uncultured interlude of blood and sweat. The deterministic implications of Marxism insured that the struggles of the immediate future would inevitably reflect themselves in a new culture, while the dialectical elements indicated that the fostering of culture, especially in the realm of the written word, would

forward the consolidation of proletarian power. In such a program the role of bourgeois literature became a consideration of state.

Although Lenin, like Marx, felt no hesitation in expressing his fondness for the bourgeois masterpieces of the past and even his preference for Pushkin over the revolutionary poet Maikovsky, the activities of the various heterodox literary groups carried over from the aesthetic circles of the late empire continued to bring to the fore the question of bourgeois literature. In the early period of military defense and consolidation little attention was paid to the "decadent bourgeois" groups which assembled in the cafés to discuss the ramifications of imagism and formalism. The attitude of patronizing tolerance toward them which persisted even after the cessation of civil war is typified in Trotsky's lecture to the formalists, wherein he attempted to orient their abstract views against the concreteness of dialectical materialism. Most of these schools, like so many of their counterparts in post-symbolistic bourgeois societies, were essentially one-man movements and died out naturally with the death of the leader; while in other cases the leaders of the asocial extremists found themselves gradually drawn from the poetic laboratory closer to the factory.

The problem of the bourgeois "fellow travelers" continued, however, to be a storm center. Since it was widely assumed that Marx and Lenin had established the fact that bourgeois literature was a reflection of bourgeois society, it followed that the writings of an ex-bourgeois group constituted a hindrance if not a danger to the carrying out of proletarian ideals and proletarian program. The struggles of such groups as the All Union Association of Proletarian Writers (V.A.P.P.), the *Na Postu* and the aggressive Proletcult of Bogdanov to set up a cultural dictatorship directed to the eradication of subversive bourgeois literature and art, took the form primarily of attacks on the "fellow travelers." In 1924 the government in order to put an end to introverted literary polemics, issued a series of formal resolutions repudiating the pretensions of any group to literary hegemony, laying down the broad principle of free competition of aesthetic ideas and recommending to the proletarian groups that they learn from the better trained bourgeois literary craftsmen the refinements of technique and at the same time inculcate them more zealously with the essentials of proletarian ideology.

The reversal during the 1926 crisis of the

government's earlier position may be attributed to the impolitic behavior of the "fellow travelers" themselves. Convinced, like many engineers and intellectual experts of the period, that the persistence of the NEP was the herald of a return to the old order, the spokesmen of the right wing literary groups were heartened to express in literary forms their newly revived hopes. Confronted with what bore the marks of a major crisis the government retaliated by organic pressure which soon communicated itself through efficiently functioning Soviet channels not only to critical but to mass opinion. Auerbach, personifying the hitherto restrained rancor of the antibourgeois groups, became the literary man of the hour. The bourgeois suspects continued as editors of their literary magazines but unimpeachable proletarians were introduced as assistants. The books of the "fellow travelers" continued to be published, but the universal chorus of disapproval, ranging from critical journals to factory literary circles, drove the authors either to silence or to more unequivocal participation in proletarian programs.

The sense of increasing security, which mounted with the startling success of the Five Year Plan, and the growing indications of a more genuine proletarianization of the bourgeois literary group led on April 23, 1932, to an official resolution liquidating the V.A.P.P. and its affiliated branches which had persisted in their literal minded version of proletarian culture and literature. With the growing sense of well being, there has been manifested recently a general disposition to relax. As the second Five Year Plan draws nearer, there begins to appear even a tendency to suggest the dangers of hyperasceticism and exclusive preoccupation with superpersonal values. At a stage when some of the non-exploitative amenities of bourgeois life—love, romance, flowers, silk—find gracious apologists, the boggy of bourgeois literature is being gradually laid. Stalin like Marx finds relaxation in Shakespeare, whose works he recommends as correctives to the overprolific manufacturers of ill constructed social tracts.

The role of the Russian Revolution in bringing literary theory from the library and seminar to the public forum has extended to most of the larger countries of Europe and America. The proletarian movements have varied in strength, ranging from that of Germany through those of Austria and Hungary to those of the United States, France and England, where the goal of

the dictatorship of the proletariat seems as distant as it must have seemed to Engels. But even where the actual movement is weakest the widespread interest in the Five Year Plan and the growing hold of proletarian ideology on critical and intellectual circles have given a new orientation and note of actuality to the various conceptions of literature. Especially in those countries such as the United States and England where the methodology of historical materialism had not already become part of the climate of opinion, the possibilities of the so-called Marxist interpretation of literature have attracted not a few literary critics and historians.

The problem of the proper attitude for proletarian literary groups in these various countries toward "the fellow traveler" revolutionist writers who seek affiliation with them has been solved on the whole in essentially the same spirit as in Russia itself. The dangers from the ideologies of right wing socialist groups as represented by Kautsky and Vandervelde and of dissenting communist groups, such as Trotsky's, are of course much stronger and have been fully appreciated by the International Union of Revolutionary Writers. The criticisms heaped by the conference at Kharkov in 1930 on Henri Barbusse's journal *Monde* for opening its columns to ideological renegades are sufficient evidence of the unwavering attitude displayed toward any vital manifestation of heterodoxy. But almost as serious as right wing heresy from the point of view of the more intelligent leaders of proletarian literature is left wing sectarianism, which insists on closing the door tight against all would be revolutionary writers of bourgeois or petty bourgeois origins. The necessity of reeducating the revolutionary affiliates and of gradually eliminating false ideology is stressed as one of the primary responsibilities of the genuine proletarian writer groups. Outside of Russia the best organized groups of proletarian writers are to be found in Germany, Austria, Hungary and China, although the nicely balanced attitude displayed toward bourgeois revolutionary writers by the proletarian literary groups of Japan was especially commended at the Kharkov Conference, where plans were laid for extending the influence of the International Union of Revolutionary Writers to the backward colonial areas which were beginning to display increasing signs of a revolutionary activity. Although the United States played a comparatively insignificant part at the conference, the intervening two years of depression have swelled

considerably the ranks of bourgeois writers sympathetic with the proletarian movement. In a number of cases the attitude displayed by members of this group toward the question of bourgeois literature has been more uncompromising than that of the less inexperienced Russian leaders. Moreover, in the ever growing literary skirmishing over the implications of class literature, the tendency to identify Marxianism with economic determinism has produced not a little confusion and disagreement as to the most valid conception of literature.

MAX LERNER

EDWIN MIMS, JR.

See: LANGUAGE; WRITING; LITERACY AND ILLITERACY; PROPAGANDA; PRINTING AND PUBLISHING; COMMERCIALISM; CRITICISM, SOCIAL; THEATER; FOLKLORE; MYTH; ROMANTICISM; MEDIAEVALISM; MATERIALISM; NATURALISM; REALISM; MODERNISM; HUMANISM; CLASSICISM; DECADENCE; DETERMINISM; ENVIRONMENTALISM; FUNCTIONALISM; NATIONALISM; INDIVIDUALISM; CULTURE; INSTITUTION; TRADITION; INNOVATION; MORALS; CENSORSHIP; CLASS; FEUDALISM; CHIVALRY; ARISTOCRACY; MIDDLE CLASS; PROLETARIAT; CLASS STRUGGLE; WOMAN, POSITION IN SOCIETY.

Consult: FOR GENERAL DISCUSSIONS OF SOCIAL, CRITICAL AND AESTHETIC PROBLEMS: Van Tieghem, Paul, *Tendances nouvelles en histoire littéraire* (Paris 1930); Greenlaw, E. A., *The Province of Literary History*, Johns Hopkins Monographs in Literary History, vol. i (Baltimore 1931); Rudler, G., *Les techniques de la critique et de l'histoire littéraire en littérature française moderne* (Oxford 1923); Baldensperger, F., *La littérature* (Paris 1913); *Philosophie der Literaturwissenschaft*, ed. by E. Ermatinger (Berlin 1930); Unger, R., *Literaturgeschichte als Problemgeschichte*, Königsberger Gelehrte Gesellschaft, Geisteswissenschaftliche Klasse, Schriften, vol. i, pt. i (Berlin 1924); Strich, Fritz, *Dichtung und Zivilisation* (Munich 1928); Cysarz, H., *Literaturgeschichte als Geisteswissenschaft* (Halle 1926); Melzer, F., *Im Ringen um den Geist: Der neue Weg der Literaturwissenschaft* (Berlin 1931); Ziegenfuss, W., "Kunst" in *Handwörterbuch der Soziologie*, ed. by A. Vierkandt (Stuttgart 1931) p. 308-38; Veblen, Thorstein, *The Theory of the Leisure Class* (new ed. New York 1918) ch. xiv; Kellett, E. E., *The Whirligig of Taste* (London 1929), and *Fashion in Literature* (London 1931); Tolstoy, Leo, *Cho takoe iskusstvo?* (Moscow 1898), tr. by Aylmer Maude as *What Is Art?* (London 1898); Zola, Emile, *Le roman expérimental* (Paris 1880), tr. by B. M. Sherman (New York 1893); Guyau, M. J., *L'art au point de vue sociologique* (Paris 1889); Brunetière, F., *L'évolution de la critique depuis la Renaissance jusqu'à nos jours* (Paris 1890); Droz, Édouard, *La critique littéraire et la science* (Paris 1893); Mentre, F., *Les générations sociales* (Paris 1920); Green, T. H., *An Estimate of the Value and Influence of Works of Fiction in Modern Times*, ed. by F. V. Scott (Ann Arbor, Mich. 1911); Meredith, George, *An Essay on Comedy* (new ed. by Lane Cooper, New York 1918); Woolf, Virginia, *A Room of One's Own* (London 1929); Sankaran, A., *Some Aspects of Literary Criticism in Sanskrit* (Madras 1929);

Sanitary regulations consist chiefly of minimum requirements for light, air space, ventilation and safety from fire. Although such laws exist in practically every state and city, requirements are not easily enforced; even honest officials find it difficult to enforce regulations concerning the conduct rather than the construction of the house.

NELS ANDERSON

See: CASUAL LABOR; MIGRATORY LABOR; SEAMEN; LONGSHOREMEN; UNEMPLOYMENT; VAGRANCY; HOUSING; HOTELS.

Consult: London, County Council, Report by the Medical Officer of Health, *Common Lodging Houses and Kindred Institutions* (London 1927); Chesterton, Ada E., *In Darkest London* (London 1926); "Die Wandererfürsorge im Rahmen der sozialpolitischen Massnahmen des letzten Jahrzehnts" in *Innere Mission*, for 1929; "Fürsorge für Obdachlose" in *Berliner Wohlfahrtsblatt*, vol. v (1929) 65-80; Farrant, Richard, "Lord Rowton and Rowton Houses" in *Cornhill Magazine*, n.s., vol. xvi (1904) 835-44; Bradwin, E. W., *The Bunkhouse Men* (New York 1928); Kettleborough, Charles, "Inspection of Hotels and Public Lodging Houses" in *American Political Science Review*, vol. vii (1913) 93-96; Wolfe, A. B., *The Lodging House Problem in Boston* (Boston 1906); Fretz, F. K., *The Furnished Room Problem in Philadelphia* (Philadelphia 1912); Solenberger, A. W., *One Thousand Homeless Men* (New York 1911); Anderson, Nels, *The Hobo* (Chicago 1923); Zorbaugh, H. W., *The Gold Coast and the Slum* (Chicago 1929); Office Central des Oeuvres de Bienfaisance, Paris, *Charitable, Bienfaisant et Social* (Paris 1926); Joffroy, A., and Dupouy, R., *Fugues et vagabondage* (Paris 1909); Calcutta Improvement Trust, *Report on the Condition, Improvement and Town Planning of the City of Calcutta* by E. P. Richards, 2 vols. (Calcutta 1914); Buell, R. L., *The Native Problem in Africa*, 2 vols. (New York 1928) vol. i, ch. iii; Gamble, S. D., *Peking: a Social Survey* (New York 1921); Mavor, James, *An Economic History of Russia*, 2 vols. (2nd ed. London 1925) vol. ii, 397-406.

LOEWENSTEIN, ALFRED (1877-1928), Belgian financier. The son of a Brussels stockbroker, Loewenstein engaged in financial affairs from an early age. About 1905 he became connected with the Pearson-Farquar group, which was engaged in the development of electrical industries, especially in South America. He led in introducing into Belgium such securities as Rio de Janeiro Tramway Light and Power, Brazilian Traction Light and Power and Barcelona Traction Light and Power, legally Canadian corporations. All of them became objects of large scale speculation on European exchanges. These operations laid the basis of his very large personal fortune. After the World War Loewenstein extended the field of his activity, apparently envisaging a great international electrical

trust; in 1923 he organized the Société Internationale d'Énergie Hydro-Électrique, a holding company principally for "Canadian" securities. The Sofina benefited from his subsequent dismissal. In 1926 he created the Hydro-Electric Securities Corporation, a holding body for North and South American electrical stock incorporated in Montreal. He was interested also in the artificial silk industry and tried to secure control of British Celanese, Ltd.; he created the International Holding and Investment Company with important interests in several large European companies. He organized other minor holding companies and in 1928 he tried unsuccessfully to secure control of the Banque de Bruxelles.

Although Loewenstein's contribution to the European popularity of its securities aided in developing South America, his celebrity was not based on the social value of his work but on the immensity of his fortune, his extraordinary ostentation and his flair for publicity. Exclusively a financier, he regarded the industrial and productive aspects of business as objects of financial combinations and stock manipulation. His activity helped to aggravate economic instability and irregularity, while his extravagance aided in discrediting capitalists and the capitalist regime. He died by falling from an airplane into the North Sea.

B. S. CHLEPNER

Consult: Hickok, Guy, "Alfred Loewenstein—the Man Who Could Not Stop" in *Bankers Magazine*, vol. cxvii (1928) 357-61.

LOGIC. The conditions under which logical theory originated are indicated by the two words still generally used to designate its subject matter—logic and dialectic. Both of these words have to do with speech, not of course with speech in the form of mere words but with language as the storehouse of the ideas and beliefs which form the culture of a people. Greek life was peculiarly characterized by the importance attached to discussion. Debate and discussion were marked by freedom from restrictions imposed by priestly power and were emphasized with the growth of democratic political institutions. In the Homeric poems the man skilled in words which were fit for counsel stands side by side with the man skilled in martial deeds. In Athens not merely political but legal issues were settled in the public forum. Political advancement and civic honor depended more upon the power of persuasion than upon military achievement. As general intellectual curiosity developed

among the learned men, power to interpret and explain was connected with the ability to set forth a consecutive story. To give an account of something, a *logos*, was also to account for it. The *logos*, the ordered account, was the reason and the measure of the things set forth. Here was the background out of which developed a formulated theory of logic as the structure of knowledge and truth.

Of itself, however, it was only a background. Definite formulation of theory was the product of fermentation introduced by the philosophers. In the sixth and fifth centuries B.C. the Greek world of the Mediterranean basin was the scene of travel, commerce and social intercourse. The result was the development among the intellectual class of a kind of cosmopolitanism. Scholars, called wise men (*sophists*), subjected the various arts—military, civic and industrial—to analysis and report. In consequence these arts, which formerly had a local meaning and scope, resting upon the tradition and customs of a particular community, were given a theoretical treatment. They were lifted out of their special environments and subjected to rationalization. The period was characterized by the preparation of an enormous number of dissertations covering all the arts. Traveling scholars as they went about offered to teach the arts by methods which rendered slow practical apprenticeship unnecessary. Finally, some of the more ambitious of these men offered their services to the young men of Athens, claiming that they could teach the “virtues”—an English word which gives only an awkward rendering of the Greek term, since the latter denotes skilled excellence in the arts, especially the political arts, combined with that power to command the attention of others which would assure civic preeminence. For those going into political life this promise involved training in ability to speak in private groups and in the public forum and formed the beginnings of a kind of practical logic.

Under the merciless attacks of Plato the name sophist took on an invidious meaning. He claimed that the method of the sophists was one of sham; that it was the art of appearing wise, not of being so. It aimed not at truth but at persuasion by whatever specious arguments would silence an opponent. Plato insisted therefore that the method of the sophists was one of contention, aiming at victory over others and hence assuming ultimate division in the structure of the mind. A true method, on the other hand, is a cooperative search, assuming an objective unity beneath all

divisions of opinion and belief and terminating in the production of a common understanding sustained by grasp of the one relevant objective truth. Hence Plato called his method dialectic, a term obviously derived from the dialogue of those engaged in the exchange of ideas.

Part of the logical work of Plato consisted in pointing out some of the tricks by which the sophists made “the worse appear the better reason.” This material was formulated by his successor Aristotle and remains today in logical treatises under the caption of fallacies. His positive contribution was his theory of the universal, the principle underlying the differences of different instances. Aristotle thus gives the Platonic Socrates credit for the discovery of induction and definition. Induction (better termed education) was the process by which the universal was extracted from a number of varying cases, definition the process by which this principle was fixed for use in all subsequent thinking. In Plato’s system this universal constituted the “essence” or true and ultimate reality of the things in question. Aristotle criticized the resulting isolation of the universal from particular things. This isolation agreed both with Plato’s mathematical interests and with his desire to obtain a method for social reform, since the separate universal provided an ideal reality which could be placed in contrast with existing things.

Aristotle was above all a naturalist. He asserted that the universal is united with particular existences, binding them together into a permanent whole (the species) and keeping within definite and fixed limits the changes which occur in each particular existence. The species is the true whole of which the particular individuals are the parts, and the essence is the characteristic form. Species fall within a graded order of genera as particular individuals fall within the species. Thinking is the correlate of these relations in nature. It unites and differentiates in judgment as species are united and separated in reality. Valid knowledge or demonstration necessarily takes the form of the syllogism because the syllogism merely expresses the system in which, by means of an intervening essence, individuals are included in species. Definition is the grasp of the essence which marks one species off from another. Classification and division are counterparts of the intrinsic order of nature.

Thus the logical theory which furnished the intellectual method of Europe for almost two thousand years was formulated when the appliances of observation and experimentation

upon which modern scientific inquiry and testing depend were lacking. Moreover the only mathematics available was geometry, upon the model of which Alexandrian scientists constructed the astronomical frame. The traditional logic was a logic for clarifying and organizing that which was already known or that which was supposed to be known and hence currently believed. For putting this material in rational form, placing upon it the stamp of rational authenticity, logic was an unrivaled instrument. But it could not furnish means for breaking through the limits of the intellectual content of current culture so as to make discoveries in new fields. The ultimate premises, or validating principles (beginnings), of all knowledge were assumed to be already in the possession of the mind. Sense perception supplied the demonstrative material on the side of the particulars, and rational perception of self-evident truths, or *axioms*, performed the same office on the side of universals. Human learning, or discovery, was limited to putting these two given things together.

In its own intention the Aristotelian logic was a logic of truth. It set forth the structure of valid knowledge, which corresponded in turn to the systematic structure of reality. But when after the decline of interest in nature ancient culture became introspective and retrospective, logic declined more and more to a mere formal instrumentality of exposition and communication. The ethical schools, skeptic, Epicurean and stoic, either deprecated the study of logic as of no importance (or even harmful in distracting attention from the supreme business of the conduct of life) or else reduced it to a mere device for avoiding error in moral judgments. Higher learning, as in the universities of Athens and Alexandria, devoted itself to organizing and interpreting the literatures of the classic past and put logic on a level with rhetoric as a formal aid in this task.

The administrative genius of Rome had little use for inquiry and reflection for their own sakes. It was interested in the method of thought as far as it could be used as a tool of political life. At first this was in form largely subordinate to rhetoric in the guidance of oratory when, as in the time of Cicero, oratory played a crucial part in civic rivalries. During the empire logic was the instrument for organizing the complex legal body of rules and decisions under fixed general principles, derived if possible from the "law of nature." Logic thus became definitely a formal discipline useful in arranging material for pur-

poses of argument, exposition and instruction.

The Christian church took over this conception of logic and employed it as an agency for similar purposes of attack and defense, especially the defense of doctrine against pagan without and heretic within. During the great scholastic period of the twelfth and thirteenth centuries there was, however, a striking revival in the scope and vitality of formal logic. The writings of Aristotle came to Christendom through the Arabs. Intellectual activity was stimulated to undertake a comprehensive organic survey and formulation of Christian doctrine, with a view to showing its intrinsic harmony with reason even when the material of revelation was above reason. The relatively scanty axioms and first principles of Aristotle were expanded to include the authoritative truths of the Scriptures, fathers, church councils and popes. An extraordinarily stringent method of demonstrative exposition was built up in which all possible objections were considered and refuted in syllogistic fashion until the authorized body of doctrine was intellectually organized into a system.

The universities, which were the centers of intellectual life, played their part. Great teachers met all comers in intellectual tournaments. Teaching was influenced by the method of doctrinal discussion while it also contributed to the perfecting of the latter method. The constructive intellectual movement which gave meaning and point to the development of formal logic degenerated after the work of unifying Christian dogma and rationalizing its structure had effected its purpose. There followed that period of hair splitting and refining which tended for a long time to throw the term scholastic into disrepute. What was even more important, the center of intellectual gravity was shifting. Secular and humane interests were taking the place of ecclesiastical and theological concerns. Satisfaction of the new interests directed man toward nature and new intellectual methods were demanded. The cry went up that the old logic was one of words only and that what was required was a logic which would enable men to cope with things. New physical instruments and materials were invented or were introduced from the Orient. Travel and exploration extended the scope of intellectual data. The demand arose for a logic of discovery and new inquiry. Literary persons joined with reformers of society and of science in ridiculing the pretensions of syllogistic logic. Mathematical concepts, in conjunction with the apparatus of the newly developing tech-

nology, replaced the ideas of essences, genera and species as central in the constitution of nature.

The full history of the revolt and of the many more or less inchoate and antagonistic attempts to formulate a new logic is practically identical with the intellectual history of the period from the seventeenth century to the present. There soon appeared a division which, while technical in outer appearance, may be said to have had an almost tragic effect upon the intellect of the western world. This was the split between those who appealed exclusively to experience in the form of sense perception as the source of valid beliefs and those who appealed to reason in the form of mathematical concepts as the ultimate authority. Ignoring refinements one may regard Francis Bacon and Descartes as the representatives of the two movements. On the whole, with some notable excursions from each side into the territory of the other, Great Britain adhered to the empirical school and the continent to the rationalistic.

The tendency of the latter school was to engage in conceptual constructions and dialectic manipulations. Aside from mathematics and the subordination of physical phenomena to mathematical formulae (a field in which it won some notable triumphs) the rationalistic school took almost complete possession of the fields of morals, jurisprudence, political theory and rational theology, theology supposedly emancipated from supernatural bonds. It was thus supreme in the entire realm of what would now be termed the social sciences. The devastating wars of the seventeenth century, civil and religious, fostered a demand for a rational and moral standard as an authority above and untouched by shifting temporal struggles. Norms were demanded which could be applied securely to empirical social and political phenomena. To this end they must proceed from the source of reason which was superior to mundane and human vicissitudes. Grotius, for example, revamped the law of nature of the mediaeval period to help rationalize international relations, and his successors in various fields of jurisprudence and morals made his method of appeal more and more stringently logical.

The tendency of the rationalistic method was optimistic and justificatory or apologetic. The underlying assumption was that empirical social phenomena, however much they might fall short of rational norms, were yet subject to their authority. Actual institutions might be criticized

in their detail as coming short of the law of reason, but their essential nature was justified as a manifestation of universal rationality. Thus Spinoza, who was anything but a political conservative in his ultimate ideal, held that the function of the state as a representative of law and therefore of reason and universality is so intimate and necessary that no conceivable abuse of authority justifies rebellion.

The religious civil wars of the seventeenth century had an opposite effect in Great Britain. They strengthened the empirical school because they created an atmosphere of moderation and compromise. The necessity for toleration was so evident that desire to carry through any comprehensive set of beliefs to its logical end was effectively dulled. The Revolution of 1688 not only established John Locke as the official intellectual apologist of popular rights (including the right and duty of rebellion) but made the empirical method developed by Locke in his *Essay on the Human Understanding* supreme in the fields of morals, politics and natural theology until the early part of the nineteenth century.

David Hume detected what was logically the weak point in Locke's empiricism by showing that it left no place for intrinsic relations and thus resulted in an intellectual atomism whose only justifiable philosophic conclusion is complete skepticism. Nevertheless, Hume appealed to habit and custom as practical if irrational unifying and relating forces. Thus he really succeeded in strengthening rather than upsetting the empirical spirit in British thought. At most he gave it a conservative turn by insisting that habit is the sole ultimate principle of unity and coherence and so prevented the critical liberalism of the school of Locke from taking a radical turn. Hume's work bore its distinctly philosophic fruit in Germany. It destroyed rationalistic complacency in the mind of Kant and started him on the way to producing a philosophy which would give sense experience the function of supplying the matter of all justifiable beliefs and practical acts, while reason would furnish its rational forms, its justifying norms and inescapable imperatives. Kant's successors in Germany all felt that Kant's reconciliation of sense and reason in logical method as well as in the practical and moral applications of the new logic was mechanical, leaving the two factors in unstable equilibrium. The movement toward their organic union culminated in what may not unfairly be called the institutional idealism of Hegel.

The technical transformations wrought by

Hegel in logical theory, with his dialectic movement of thesis, antithesis and synthesis, lie beyond the scope of this article. In substance it may be said, however, that Hegel sought a logic which would avoid the abstract, non-historical character of the earlier semimathematical rationalism. He wished in effect to make the movement of history the supreme rational manifestation. If philosophical and terminological technicalities are ignored, his work may be characterized as an attempt at a logical apotheosis of the historical method; indeed it was largely through his influence that the historical method was in the first half of the nineteenth century brought to consciousness in the fields of law, politics, morals, language, religion and political economy. Hegel piously retained the rationalistic idea of the supremacy of reason and absolute mind in history.

As far as fundamental logic was concerned, however, there was no great upset when Marx "stood Hegel on his head," as he said, and treated the ultimate logic and dialectic of history as essentially economic in character. The growing importance of evolution in biological science, with its stress on biological realism or biological materialism, was largely responsible for this rise of economic realism or materialism as an interpretation of human history. With Marx' official successors the materialistic dialectic of history was developed in an absolutistic spirit which made the complete downfall of bourgeois and capitalistic society inevitable, leading so necessarily to the social synthesis of communism as seemingly to free human action and planning from any responsibility in producing social change. The net tendency of the logic of historicism in its identification with evolutionism was to elevate an automatic movement of history to the position of supreme arbiter.

In Great Britain during the nineteenth century there was a rehabilitation of empirical method. It is noteworthy that Mill's logic was originated by his desire to introduce scientific method into social and moral subjects. He was offended by the adherence to dogmatic authoritarian methods in this field as well as by the position, typified by Macaulay, that in morals and politics we must depend only upon precedent and individual insight, political phenomena as such being outside the scope of scientific method. According to Mill, we can rise from observations to hypotheses, develop these hypotheses deductively and then apply them to social as well as to physical material. Mill's particularistic assumptions led him, however, into an extreme individualism

which prevented realization of his scientific aim. On the other hand, the increasingly dispersive and disintegrative tendencies of social life led a group of English thinkers to rely upon the "organic" logic of the German idealistic school as the best means of combating atomistic individualism. For a generation in the latter part of the nineteenth and the early part of the twentieth century this philosophy and logic were almost dominant in English thought. Their influence coincided with the ebbing of the liberalism of the type of Locke and Mill and the growing desire for state regulation of private enterprise. Whether Hegel so intended or not, there is no doubt that the premises of his logical method are conducive to collectivistic policies in social matters.

The split in schools of method earlier referred to as characteristic of modern life continues into the present. On the whole at the present time the conceptualistic methods of the rationalist school find little favor in the social sciences. The latter are devoted largely to empirical fact finding and to the attempt to arrive at social laws "inductively." Abstinence from general ideas is accompanied, however, by remoteness of social method from guidance of social, legal and economic phenomena. The split is called tragic because it is the sign of failure to find a generally accepted method which will do in control of social forces what scientific method has accomplished in control of physical energies. We now oscillate between a normative and rationalistic logic in morals and an empirical, purely descriptive method in concrete matters of fact. Hence our supposed ultimate ideals and aims have no intrinsic connection with the factual means by which they must be realized, while factual data are piled up with no definitely recognized sense of their bearing on the formation of social policy and the direction of social conduct.

Consciousness of this situation has been a main factor in a new attempt to generalize the experimental side of natural science into a logical method which is applicable to the interpretation and treatment of social phenomena. So far this recent movement remains almost entirely American in character. It was initiated by Charles S. Peirce and carried out especially in morals and religion, under the name of pragmatism, by William James. It is characteristic of this logical school to insist upon the necessity of conceptions which go beyond the scope of past experience for guidance of observation and experiment, while it also insists that ideas are only

tentative or working hypotheses until they are modified, rejected or confirmed by the consequences produced by acting on them. Emphasis upon experiment differentiates this method from historic empiricism as well as from present fact finding methods. The latter treat social inquiry as wholly outside the facts investigated and merely survey and record data in a certain field. The *novum organum* called for by the experimental logic insists that no such separation is possible in social matters, and that ideas and principles must be employed to deal overtly and actively with "facts" if, on one side, the facts are to be significant and if, on the other, ideas and theories are to receive test and verification. Experimental logic would resolve the controversies, now four centuries old, between reason and sense experience by making both concepts and facts elements in and instruments of intelligently controlled action.

JOHN DEWEY

See: METHOD, SCIENTIFIC; SCIENCE; PHILOSOPHY; SOPHISTS; SCHOLASTICISM; PRAGMATISM; MATERIALISM; POSITIVISM.

Consult: Prantl, Carl von, *Geschichte der Logik im Abendlande*, 4 vols. (Leipzig 1855-70; reprinted 1927); Harms, Friedrich, "Geschichte der Logik," ed. by Adolf Lasson in Harms' *Die Philosophie in ihrer Geschichte*, 2 vols. (Berlin 1879-81) vol. ii; Adamson, Robert, *A Short History of Logic*, ed. by W. R. Sorley (Edinburgh 1911); Enriques, Federigo, *Per la storia della logica* (Bologna 1922), tr. by Jerome Rosenthal as *The Historic Development of Logic* (New York 1929); Dewey, John, *Essays in Experimental Logic* (Chicago 1916), and *Philosophy and Civilization* (New York 1931); Schiller, F. C. S., *Logic for Use* (London 1929); Peirce, C. S., *Collected Papers*, ed. by Charles Hartshorne and Paul Weiss, vols. i-ii (Cambridge, Mass. 1931-32) vol. ii; Cohen, M. R., *Reason and Nature* (New York 1931); Marck, Siegfried, *Die Dialektik in der Philosophie der Gegenwart*, 2 vols. (Tübingen 1929-31); Engels, Friedrich, "Dialektik und Natur," ed. by D. Ryazanov in *Marx-Engels Archiv*, vol. ii (1927) 117-395; Bradley, F. H., *The Principles of Logic*, 2 vols. (2nd ed. London 1922); Social Science Research Council, Committee on Scientific Method in the Social Sciences, *The Methods in Social Science*, ed. by Stuart A. Rice (Chicago 1931).

LOISEL, ANTOINE (1536-1617), French jurist. Loisel was a pupil of Cujas when the latter was an advocate at the Parlement of Paris; on various occasions he exercised the functions of *avocat du roi* and procurator general. Of very extensive learning, he published numerous works of history, archaeology, philology and Latin poetry. As a jurist he collaborated with Cujas in the study of Roman law and discovered important unpublished texts, the *Consultatio veteris*

jurisconsulti and the *Novellae majoriani*. But his principal work was the *Institutes coutumières*, which is the first synthesis of the customary law applied in the north of France. Until then the customs of each town and of each province had been the subject of independent monographs. Dumoulin, who first thought of unifying French law, taking as a basis the custom of Paris, failed in his attempt because it was too ambitious. Loisel, on the contrary, composed a very brief work made up of short legal rules formulated in archaic and picturesque language and assuming frequently the form of proverbs, which made them easily remembered. A great number of the rules retouched and rejuvenated have passed into the *Code Napoléon*. Loisel's intention was to compose for French customary law a work analogous to the Institutes of Justinian, a clear and convenient manual giving the essential principles and clarifying controversial points. Although the *Institutes coutumières* contain the same lacunae as the customs from which they are taken—they are very summary on the law of obligations but more complete on the law of persons, property, succession, marriage contracts and on feudal law—they may be considered the best résumé extant of French customary law. But their conciseness has obliged editors to add commentaries of unequal value. Loisel's *Pasquier, ou dialogue des avocats*, contains valuable information on the history of lawyers and the functioning of justice in ancient France.

GEORGES BOYER

Important works: *Institutes coutumières*, first published in Coquille, Guy, *L'institution au droit des françois* (Paris 1607); new ed. with notes by François de Launay (Paris 1688); ed. with notes by E. J. de Laurière, 2 vols. (Paris 1710 and 1758), reedited by A. M. J. J. Dupin and E. R. L. de Laboulaye, 2 vols. (Paris 1846); *Pasquier*, first published in *Divers opuscules* (Paris 1652), containing biography of Loisel by his grandson Claude Joly; new ed. by A. M. J. J. Dupin (Paris 1844).

Consult: Demasure, A., *Antoine Loisel* (Paris 1876); Viollet, Paul, *Droit privé et sources: histoire du droit civil français* (3rd ed. Paris 1905) p. 231-36, and bibliography p. 260.

LOMBARD, PETER. See PETER LOMBARD.

LOMBROSO, CESARE (1835-1909), Italian criminologist. Lombroso, who was professor of legal medicine at the University of Turin, came into prominence by the publication of his book *L'uomo delinquente*, in which he affirmed the atavistic origin of the born criminal. He based his contention on numerous anatomical, phys-

The organization of the trust was in fact designed rather to bring about this end than to effect the theoretical economies of a production for an international market. The structure of the trust, the concentration in voting power and the complexities involved by the financing program of its directors led inevitably to uncontrolled and uncontrollable policies, of which Kreuger's manipulations were only one manifestation.

The collapse of the Swedish match trust in 1931 created an entirely new world situation. At the end of 1931 the Svenska Tändsticks had outstanding obligations totaling 457,000,000 crowns besides guaranties, collateral and security obligations, which probably rose considerably during the first few months of 1932. A few months after Ivar Kreuger's suicide, when there fell due short term obligations which could not be met, the Svenska Tändsticks was granted a moratorium. A great part of the share capital of 360,000,000 crowns and the reserves of 245,000,000 crowns were considered lost. Its most important subsidiary, the American International Match Company, has already declared itself bankrupt.

The future of the trust—and hence that of the world's match industry—is uncertain. It is possible that a new firm may buy up the trust's assets and rights; it is likewise possible that Svenska Tändsticks may be able to continue operations. But there also exists the possibility that the trust will disintegrate, that the match industries of the various countries may again become independent of Stockholm and that bitter competition will begin once more. But the new competitive struggle would be fought on a new basis. In Poland and the Baltic states—and in fact in almost all the countries in which the Swedish match trust shared a manufacturing monopoly—the old factories have been modernized and new ones built, so that these countries produce much more efficiently than before the World War; indeed they are just as strong competitively as the Swedish factories. Should a new competitive struggle break out in the world market, the predominant position of the Swedish match industry would be imperiled for the first time and the ranks of Sweden's former competitors—Belgium, Austria, Japan and Russia—would be joined by other countries, some of which could probably offer matches at lower prices than the Swedish factories.

WILHELM GROTKOPP

See: COMBINATIONS, INDUSTRIAL; HOLDING COMPANIES;

MONOPOLIES, PUBLIC; INDUSTRIAL HAZARDS; INDUSTRIAL HYGIENE.

Consult: Schaff, Erich, *Internationale Verflechtungen in der Zündholzindustrie: Ein Beitrag zur Kollektivierung der modernen Wirtschaftsordnung*, Hessische Beiträge zur Staats- und Wirtschaftskunde, vol. ii (Leipzig 1929); International Labour Office, "Lucifer Matches" in *Occupation and Health*, Brochure no. 7 (Geneva 1925); Clark, V. S., *History of Manufactures in the United States*, 3 vols. (new ed. New York 1929) vol. iii, p. 292-93; United States, Congress, House of Representatives, Ways and Means Committee, *White Phosphorus Matches: Hearings*, 3 vols. (1910-12); Dixon, W. H., *The Match Industry: Its Origin and Development* (London 1925); France, Commission Chargée d'Étudier les Questions Concernant l'Organisation et le Fonctionnement des Monopoles des Tabacs et des Allumettes, *Rapport présenté par M. André Citroën* (Paris 1925); Rives, Marcel, *Le monopole des allumettes en France* (Paris 1925); Grotkopp, Wilhelm, *Der schwedische Zündholztrust*, Nordische Studien, vol. viii (Brunswick 1928); Freude, Siegfried, *Der schwedische Zündholztrust*, Nürnberger Beiträge zu den Wirtschaftswissenschaften, vol. viii (Nuremberg 1928); Schwarzenberger, Georg, *Die Kreuger-Anleihen. Beitrag zur Auslegung der internationalen Anleihe- und Monopolverträge sowie zur Lehre vom Staatsbankrott* (Munich 1931); Marcus, Alfred, *Kreuger und Toll als Wirtschaftsstaat und Weltmacht* (Zurich 1932); Mennevée, Roger, *Monsieur Ivar Kreuger le roi des allumettes* (Paris 1932); Sparling, Earl, *Kreuger's Billion Dollar Bubble* (New York 1932); Hurth, Carl, *Die deutsche Zündholzindustrie in der Nachkriegszeit*, Münchener volkswirtschaftliche Studien, n.s., vol. viii (Jena 1929); Spickermann, Edmund, *Die Bedeutung des Zündholz- und Tabakmonopols für die Finanzgestaltung des neuen Polens* (Lodz 1928); India Tariff Board, *Match Industry*, vols. i-iv (Calcutta 1928-29); Vakil, C. M., and others, *Growth and Development in Modern India* (Calcutta 1931) ch. xiii; "Match Industry in China" in *Chinese Economic Journal*, vol. x (1932) 197-211.

MATERIALISM as a philosophy arose out of an attempt to substitute for religious cosmogonies an account of the world drawn from principles and materials familiar to man in everyday activity. Although the theories of the early Greek physicists that the original stuff or abiding principle of things (*physis* has been variously interpreted)—is water, air or fire already express a materialistic approach, it was not until Democritus that materialism emerges as a systematic philosophy. The fundamental proposition of Democritus' thought is that nothing exists save the movement of atoms in the empty void; all else is illusion. "By use there is sweet, by use there is bitter; by use there is warm and by use there is cold; by use there is color. But in sooth there are atoms and the void." Differences in quality are reduced to differences in the number, size, shape and configuration of atoms, whose

movements are determined by eternal and necessary law. The soul itself consists of fine, smooth atoms, whose motion produces the phenomena of life. There are no immaterial active entities. Here are expressed in the crude form of the science of the day the characteristic doctrines of almost all subsequent materialist philosophy.

Epicurus and his followers took over the whole of the Democritean atomism. Their only modification was to introduce in the primal downward course of atoms a chance deviation in order to set up the swirl out of which in time the world was generated. In Epicurus and Lucretius the materialist philosophy serves the purpose of what may be called personal hygiene or personal salvation. It is invoked to free men who have the means to enjoy leisure from the fear of death, the gods and the blows of adversity. Since the soul is composed merely of the most rarefied and mobile of the atoms, death is nothing but their dispersion into space and the annihilation of all consciousness; and as there is no pain where there is no consciousness, a wise man will not fear death. Denying that purposive acts from without can ever interfere with the natural course of atoms, Epicureanism relegated the gods of popular theology to the stellar spaces, where they live the lives of Epicurean philosophers in complete independence of society. Pleasure or the absence of pain—produced by gentle motions within the body—is the chief good. Since the locus of consciousness is the material soul, the only evil which man can experience is disturbance of mind. Indeed pain of the body is only one type of disturbance of mind and can be banished by cultivating the arts of philosophy and conversation. From quite different premises and with a different motivation the stoic philosophers embraced a thoroughgoing materialism of a peculiar character. The good is defined not as a quality of human desire or consciousness but as the fulfilment of objective and necessary laws of one physical whole in which all events are pre-determined. Man's thought and emotion, his ideas of the good and the right, are merely expressions of the organization of bodies. Morality is not only natural but literally and actually physical. The universal and eternal "natural laws of justice based on reason," to which later western thought always appealed in opposition to the conventional theory of morality and from which were derived the revolutionary doctrines that slavery is against nature and that all men are born equal, were not put forward as ethical resolutions but as propositions in physics.

Although Aristotle had polemicized against Democritus and atomists in general on the ground that they could not properly explain the transition from potentiality to actuality which his own doctrines of final forms and inner teleology were designed to meet, none the less certain elements of the Aristotelian philosophy provided the only materialistic vestiges in the spiritualistic tradition of Platonized Christianity. Aristotle's naturalism, which ruled out the Judaeo-Christian dualism between the creator and the created through the doctrine of the eternity of the world and of motion, reappeared in the Averroism of the thirteenth century. Aristotle's "behavioristic" psychology, which taught that the soul was the form of the body and consequently could not exist in independence of the body, came into conflict with the orthodox doctrine of immortality. Aquinas himself by accepting the Aristotelian view that matter is the source or principle of individuality (*principium individuationis*) barely escaped the charge of heresy on the ground that this militated against the existence of immaterial individuals, such as angels and the souls of the dead unhoused in any bodies until the day of resurrection.

Even more important, Aristotle's contention that only concrete individual substances, or wholes, are real offered a basis for the nominalists to attack the existence of substantial forms in both their Platonic (*universalia ante rem*) and Aristotelian (*universalia in re*) forms. The social implications of the nominalistic interpretation of universals were enormous. It meant first of all an attempt to break down the intellectual authority of the church with the heretical doctrine of the twofold, or double, truth. Further by maintaining that only individuals were real it suggested that all associations—from the holy and universal church to the secular provincial guild—had a derivative status and could claim no higher reality or rights than the activities and desires of its individual members. Theoretically nominalism justified an appeal to natural rights doctrines in politics; practically it expressed the dissident tendencies of local church organization in opposition to a central revenue gathering agency whether situated at Rome or at Avignon.

The historical resurgence of materialism in modern European thought was marked by the introduction of experimental method and the development of mechanistic atomism among the philosopher-scientists of the sixteenth and seventeenth centuries. Stimulated by the needs of industry and war, men like Leonardo da Vinci

and Galileo were led to an investigation of the controlling conditions of natural phenomena. This meant a shift to the measurement of the simplest physical relations observable in nature and the extrusion of all attempts to explain occurrences in terms of forms, essences or qualities. These were themselves taken to be the effects, not the causes, of the movements of material particles; and the way was open for speculative materialism to project its mechanical explanation of phenomena into all realms of experience which were temporarily or structurally involved with physics. The two main lines taken by the materialist philosophy were expressed in the schools which followed the thought of Descartes in France and Bacon in England.

Descartes' rationalistic mechanism, despite his rejection of atomism and his predilection for mathematical abstraction instead of experiment, led him logically to a materialistic solution of the psychophysical problem. Although he called the universal cause and substance of all movement God, in his explanation of the motion of specific bodies he used only familiar dynamical principles, such as the conservation of momentum and mechanical laws of impact, conduction and the like. A dualist in his metaphysics, he was strictly monistic in his physics, introducing no distinction between organic and inorganic nature. Plant and animal behavior were assimilated to the behavior of machines. His followers in France continued this line of thought and, to the dismay of Descartes himself, sought to explain the human soul and its succession of ideas as modes of the body. In the eighteenth century Lamettrie, a physician who proclaimed the celebrated doctrine that man is a machine, explicitly avowed himself to be a Cartesian.

In England it was Francis Bacon who sounded the tocsin of revolt against metaphysical spiritualism. Although his own ideas of scientific method were narrow, crude and not altogether consistent, his attempt to substitute for the Platonic-Aristotelian conception of substantial forms the Democritean conception of form as "the law of the process by which things arise" provided a powerful stimulus to the revival of atomism as a basis for materialism. Hobbes systematized what Bacon had begun. In one of the most extreme and thoroughgoing systems of materialism the world has ever seen he stated the fundamental propositions that all change is motion and that geometry, mechanics, physics, ethics, politics, are sciences concerned with tracing the effects of motion in the domain of

nature, mind and society. From these premises Hobbes argued consistently enough that all psychical phenomena from the secondary qualities to the highest reaches of the mind were "apparitions," lacking both substance and objectivity. He uses synonymously the terms ghost and incorporeal substance. The most celebrated use to which Hobbes put his materialism was to offer it as the foundation of political absolutism. The fundamental law of motion expresses itself in human behavior as the impulse to self-preservation. Pleasure arises when the impulse to self-preservation realizes itself in the exercise of power; pain, in the actual or anticipated frustration of this impulse. In a state of nature, other things being equal, the pain of suffering men's power over us far outweighs the pleasures of imposing our power over them. Reason, which is grounded in human nature, suggests instead of the reciprocal destruction involved in the war of all against all that there be formulated "convenient articles of peace, upon which men may be drawn to agreement. These articles, are they, which otherwise are called the Laws of Nature." Hobbes does not assert this agreement or contract to be a recorded historical fact; he contends that it is involved in the very existence of a stable community. The validity of such laws depends upon the existence of an absolute and indivisible sovereign power to enforce them. Absolute monarchy is the best form of sovereignty. The monarch as the repository of all existing law and the source of future law has the right to total obedience until he is overthrown.

The influence of Hobbes' materialism, reinforced by Locke's theory of experience, was to reappear in the philosophy of the French Enlightenment—especially in the writings of Lamettrie, Diderot and Holbach. Accepting from Hobbes the proposition that the world consists only of matter in motion and from Locke that all ideas and knowledge are derived from experience and reflection—which Condillac and Helvétius, Locke's disciples, reduced to sensation—the French materialist school now faced the central problem of explaining the way in which sensation or consciousness arose from the movements of matter. Diderot offered the bold solution that "sensation is a general property of matter, or a product of its organization." Differences in the degree of consciousness were correlated with differences in the complexity of material organization. Mind was a function of matter in the same way as light, heat and sound. Correlated with this view was the belief that mental

phenomena obeyed the same mechanical laws as matter. The difficulties of deriving the unity of consciousness from isolated elements of vague feeling in material bodies were no more adequately met than in the writings of the German materialists of the 1840's. The primary motivation of both the French and the German school of materialism was not the creation of a consistent theoretical system but the discovery of a starting point for political, religious and social reform. Nothing was more congenial to the social reformers and humanitarians than the proposition that man is completely the product of his environment and that the differences between virtue and vice, knowledge and ignorance, may be controlled by changing the environmental stimuli. At one stroke the doctrine of original sin and natural grace were ruled out in accounting for differences in political, social or biological status; the way was cleared for the infinite perfectibility of man through reasoned control of nature; and a fervent belief in the possibility of a science of human welfare, as objective as the principles of motion which were at its base, took possession of the foremost thinkers of the materialist school.

The intensification of the social question in the nineteenth century was largely responsible for the rise of a new type of materialism, the dialectical materialism of Karl Marx and Friedrich Engels. In a formal philosophic sense this doctrine is descended, at least on one side, from German idealism, which began with Kant and culminated in Hegel. Following Hegel's death a reaction toward naturalism set in among a group of his followers, who felt that the master's philosophy led too much in the direction of political conservatism and religious mysticism. These rebellious followers sought, however, to retain the emphasis on the dynamic character of experience and particularly on the active role of consciousness in social life, which had been largely neglected by naturalist and materialist philosophies. In the case of dialectical materialism even the dialectical method of Hegel was taken over, modified and set to function within a materialist context. A full exposition of its principles is given in the succeeding section of this article. Here it is sufficient to note that its development took place in the period from the 1840's to the 1890's within the circle of the Marxian socialist movement. It remained largely unknown to non-socialist thinkers, and even among professed Marxian socialists it was not always accepted. The success of the Communist revolution in

Russia has, however, made it the official philosophy of the Soviet Union and has given it a new character as a contemporary force.

The nineteenth century witnessed an extension of the materialistic modes of thinking to psychology and biology but at the same time it revealed the inadequacies of the traditional materialism, which sought to reduce the laws of animal behavior and of human thinking to the simple successions of mechanics. The natural adaptation of animal species to their environment, which had hitherto seemed too complex and widespread to be attributed to happy accident, now received a plausible interpretation in terms of variation, selection through struggle for existence, and hereditary transmission. Evidence that new species arose through modifications of the old strengthened the hypothesis of the unitary origin of all life and furthered the tendency to treat man and his every activity as part of natural history. Investigation of the physiology of the sense organs and of the nervous system, although it resulted in a repudiation of the naïve mirror theory of sensation, brought to light the thousandfold dependence of psychic experience upon the organization of the body and occurrence of external stimuli. But as the gaps in human knowledge were progressively eliminated through discovery and experiment, it became clear that what was distinctive in the behavior of each type of structure could not be deduced from the behavior of the simpler types. The laws of biology presupposed those of physics, the laws of psychology those of biology; but each set of laws has to be treated as genuine emergents, otherwise the novelty and variety of the world would have to be read back into the mechanical configuration of the primordial slime. By the end of the century the very "solidity" which materialism had derived from its appeal to mechanics vanished in the electromagnetic interpretation of matter, according to which even mass is no longer a constant. From different directions today the quantum theory and the theory of relativity have contributed to undermining other assumptions of traditional materialism—such as the absoluteness of space and time and the universality of determinism and of the causal relation. The alleged idealistic implications of modern physics have induced a more sympathetic attitude toward experimental science on the part of religious orders in western Europe. In recognizing that it can do justice to only one aspect of experience, that the human mind enters constitutively into the formulation of funda-

mental concepts, that its method is approximative and applicable only to series of phenomena and not to individuals, science, so it is said, has lost its materialist sting.

This summary sketch of some of the more important historical forms of materialism is sufficient to indicate that a variety of attitudes and motives has entered into its systematic construction. Undoubtedly the most recurrent motive behind the theoretical formulation of materialism has been the desire to win new spheres for human control from the obstructive influence of animistic, spiritualistic and religious thought. As a consequence most materialistic philosophies have been opposition movements. From Democritus to Karl Marx they have leveled their arguments against dominant systems of spiritualistic thought in which emphasis on immaterial entities and final causes have interfered with the discovery and control of the specific mechanisms of things. The ultimate impact of materialistic doctrine therefore has always been social and cultural. These social and cultural objectives have varied all the way from the desire to provide a more stable base for government than that derivable from religious authority to the desire to extend the sphere of economic activity in independence of the sanctions of church and state.

DIALECTICAL MATERIALISM is the philosophy sketched out in the philosophical writings of Marx and Engels, part of which has been published only recently following the revival of this philosophy as the official doctrine of Soviet Russia. Its chief textual sources are: Marx and Engels, *Die heilige Familie* (written 1844); Marx, economic and philosophical manuscripts written in 1844 (first published in *Gesamtausgabe*, pt. i, vol. iii), *Thesen über Feuerbach* (written 1845); Marx and Engels, *Die deutsche Ideologie* (written 1845-46); Engels, *Herrn Eugen Dührings Umwälzung der Wissenschaft* (1878), and *Dialektik und Natur* (first published 1927). The philosophy is by no means a completely worked out system; also because of its close union with the practise and needs of the international working class, interpretations of controversial points and elaboration of fragmentary indications are subject to revision. One may, however, attempt to expound the doctrine by means of its leading principles, including those stated as such in the writings of Marx and Engels and those which in the judgment of the writer would seem to be implied.

(1) *The principle of realism.* The existence of

any object does not depend upon its being perceived or experienced in any way. Although some characters of existence may depend upon the mode in which it is experienced, existence itself cannot be deduced from psychological or logical considerations alone. Time, space, causality and other fundamental categories can serve as organizing forms of consciousness only in so far as they express objective attributes of matter. Dialectical materialism consequently lines itself up with the great realistic tradition in western thought according to which will, knowledge and activity depend for their effectiveness upon certain structural features of the situation in which they function.

(2) *The principle of dialectic.* As the name indicates, dialectical materialism took over the dialectical interpretation of reality developed by Hegel. The term dialectic as originally used in Greece meant the process of getting at the truth through a debate carried on by opposing sides. For Hegel as for some of the other post-Kantian philosophers the movement of experience itself represents a sort of logical debate carried on by reality, with a logical thesis being opposed by the logical antithesis and yielding thereby an endless movement toward a higher synthesis. The ultimate goal of the Hegelian dialectical process is God, or the pure spirit freed from its self-alienation in matter, and it is this goal and its implications that are rejected by Marx and Engels at the moment that they retain dialectic as an interpretation of the process of reality. The extent of the debt of dialectical materialism to the Hegelian philosophy and its divergence from it may best be indicated in Marx' own words. In the preface to the second edition of *Das Kapital* he writes: "My dialectic method is not only different from the Hegelian, but is its direct opposite. To Hegel, the life-process of the human brain, i.e. the process of thinking, which, under the name of 'the Idea,' he even transforms into an independent subject, is the demiurgos of the real world, and the real world is only the external, phenomenal form of 'the Idea.' With me, on the contrary, the ideal is nothing else than the material world reflected by the human mind, and translated into forms of thought. The mystifying side of Hegelian dialectic I criticized nearly thirty years ago . . . [but] the mystification which dialectic suffers in Hegel's hands by no means prevents him from being the first to present its general form of working in a comprehensive and conscious manner. With him it is standing on its head. It must be turned right side up again, if

you would discover the rational kernel within the mystical shell."

(3) *The principle of determinism.* Although there are chance elements in the world, the methodological assumption of science presupposes that all objects of inquiry in different fields are subject to law. There can be no dispute about this, and where there is dispute the real problem is whether some subject matter can be treated scientifically. Dialectical materialism holds that no limits can be drawn to the progress of science and although many things will probably remain unknown none of them is inherently unknowable. Engels in his *Feuerbach* makes short shrift of Kant's *Ding an Sich*, which like Spencer's Unknowable conditions experience but is never known. He repeats Hegel's argument that the nature of a thing is not some mysterious x but the sum total of all its qualities or the synoptic formula which unifies its appearances from all possible points of view.

(4) *The principle of emergence.* Mechanism is the simplest but not the sole expression of determinism. This is clear from the very phenomena of growth and development, with which dialectical development is so vitally concerned. Growth and development involve diversification; mechanical law merely asserts, however, that like causes give like effects. Another principle must therefore be introduced to account for the palpable facts of variation and evolution. This is the principle of emergent qualities. It states that differences in quantity ultimately give rise to differences in quality and that the relations between the qualities cannot be reduced to or deduced from the quantitative relations which define the initial series. In the course of time and on one level after another there arise new groups of qualities and patterns of behavior. Types of laws are discovered which hold for limited domains and which in turn condition but do not determine the development of other laws. Thus the laws of physics hold for all things inanimate or living; but the laws of biology, although they rest upon the laws of physics, are distinct and cannot be deduced from them. Similarly the laws of biology hold for all living things human or non-human, but the laws of human psychology, although they rest upon the laws of biology, cannot be deduced from them. The recognition that the laws of mechanics, biology and other sciences contain unique qualitative elements whose analysis demands special explanatory categories is the great differentiating mark between "vulgar" and dialectical materialism. On this issue

dialectical materialism parallels the positions taken by the philosophies of emergent evolution and emergent naturalism in England and the United States.

In Russia today this emphasis upon the specific and qualitatively unique aspect of each situation has produced a rift in the school of the dialectical materialists. Those who seek to explain situations under the broad formal laws of physical or social behavior (depending on the realm in which the phenomena fall) are accused of being monistic mechanists. It is said that in their attempts to operate with general principles they overlook the Hegelian insight that principles are modified in every particular application. They are also charged with disregarding Engels' dictum that independently of the specific expressions in which it is always found matter as such is a pure mental construction or abstraction. On the other hand, those who are called mechanists dub their opponents idealists and claim that besides multiplying entities without necessity they are themselves guilty of trying to destroy individuality by reducing it to a complex of relations. They contend that the opposing faction of the dialectical materialists has fallen victim to a too sympathetic study of the Hegelian logic, which is reflected in their tendency to regard matter in its different forms as a precipitate out of types of logical relations of varying complexity.

(5) *The principle of temporalism.* Marx was peculiarly sensitive to the omnipresent facts of change. And since for him time was the objective measure of change, his philosophy of dialectical materialism has been regarded, not without justice, as a variety of critical historicism or temporalism. Not only are the objects of judgment continually taking on new characters and qualities, but ideas and judgments themselves possess implied time coefficients. Indeed Marx goes so far as to assert in his *La misère de la philosophie* that "ideas and categories are not more eternal than the relations which they express." They are historical and transitory products." It is important to remember, however, that the reference here is to social relations, which change more rapidly than physical and less rapidly than psychological relations. For to maintain that everything changes at the same rate would be equivalent logically to saying that everything is at rest. Consequently the principle of temporalism reenforces the principle of emergence by distinguishing between the different kinds of historically enduring entities.

(6) *The principle of interaction.* The activistic

impact of Marx' thought led him to two problems which had baffled all previous philosophers of materialism. The first was to account for the effective character of individual consciousness, which had been treated by early materialists as a mere chemical product of the body; the second was to explain the transformative character of class consciousness, which is so integral a part of any social philosophy that proclaims the virtues of revolutionary mass action. The crucial importance of these problems comes to light in the terrific struggle which Lenin waged against the doctrine of "spontaneity" from 1902 (in *Chto delat?* tr. as *What Is to Be Done?* in vol. iv of his *Collected Works*, 1927) down to 1922, a struggle which caused him to be termed a heretic and idealist by the more orthodox sections of the German Social Democratic party. Marx meets the first problem in his dialectical theory of perception. In his first and fourth glosses on Feuerbach he stresses the fact that sense perception is not a form of knowledge but a practical sensory activity by which the organism adjusts itself to external stimuli. Out of the interactive process of adjustment knowledge is born. Knowing is not a passive reflection or image of some fully formed antecedent existence but a method of acting upon that existence. Its import consequently is practical, not in the narrow sense of utility but in the sense that it involves a method of handling material instead of merely contemplating it. The second problem finds its solution in Marx' conception of class consciousness as the carrier of historical forces. Class activity is the mode by which the socially determined comes to pass. But only that activity can be effective which on the basis of social needs projects ideals and exercises itself on their behalf. In this activity the victorious class leads events; it does not slavishly wait and follow them. "The materialistic doctrine that men are the products of conditions and education . . .," Marx reminds Feuerbach, "forgets that circumstances may be altered by men and the educator has himself to be educated."

(7) *The principle of biological materialism.* Marx was one of the earliest disciples of Charles Darwin. But he vigorously contested the attempts made by the Social Democrats to bring over into sociology the concepts of the struggle for existence and the survival of the fittest. Such attempts were, in his eyes, nothing else than Calvinism in modern dress. None the less, in letters to Engels, Lassalle and Kugelmann he hailed Darwin's work as providing the natural-

istic foundations of the philosophy of dialectical materialism. This meant that all human attributes were to be taken as continuous with biological tendencies already present in lower forms; that thinking especially was to be regarded as a natural event; that all forms of dualism were to be shown to be distortions of the results of the evolutionary process; that fixed natural forms and external teleology were to be finally banished from science; and that all cultural life, although quite distinct from organic biological tendencies, necessarily presupposes the existence of these biological tendencies as a necessary condition. Together with Engels he suggests that there is no purely biological behavior—that certain changes in man, as, for example, changes in stature, may be culturally conditioned. He accepts Hegel's position in the *Phänomenologie* that even sense perception, not merely the contents of perception but the way of perceiving and the meanings disclosed in the act of perceiving, is as much a cultural as a psychological phenomenon.

(8) *The principle of historical materialism.* Dialectical materialism applied to the realm of culture, that is, to the field delimited by the common activity of men as *members of society*, gives us the principle of historical materialism. This is the hypothesis that, in the words of Engels, "the causes of all social changes and political revolutions are to be sought, not in men's brains, not in Man's better insight into eternal truth and justice but in changes in the modes of production and exchange. They are to be sought not in the philosophy but in the economics of each particular epoch."

(9) *Social interpretation of categories.* A further extension of the principle of historical materialism is involved in the attempt, already begun by Marx and Engels, to offer a social interpretation of common sense categories. The starting point of this type of investigation is the belief that occupational activities determine the fundamental modes of social behavior and that in this behavior are formed ideas, attitudes and habits which express themselves in other fields of culture. There arises a whole schedule of desires, values and criteria of satisfaction and validity which dominate the interpretation of social and natural experience. Philosophies of life sum up in technical and poetic idiom the appearance of the world from the varying perspective of different economies.

(10) *The principle of practise (Praxis).* Of all the principles of the philosophy of dialectical

materialism the most fundamental is the indissoluble unity of theory and practise. From this principle practically all the other principles of Marx' method may be derived. For Marx theory arises as a general method of meeting the specific problems of man, nature and history. The existence of the world as a whole is not an intelligible problem, just as the question "Why does anything exist and not nothing?" (Schelling) is not an intelligent question. A theory has meaning only in so far as it gives us a leverage in something concrete which bears upon the solution of a problem. The series of such concrete effects is all that can be discussed when the validity of a theory is in question. A theory is true in so far as it enables us to settle the concrete difficulties out of which these problems have arisen. A theory which does not ultimately indicate something to be done, which does not make a difference to a situation which it calls forth, is a form of verbal behavior which at best can have only aesthetic value. Failure to realize that practise is the life of theory and theory the guide to practise is responsible for all the futile questions about the possibility of knowledge which have vexed mankind, and at different times has resulted in mechanism, resignation, barren formalism, skepticism and other attitudes hostile to intelligent control of the physical and social environment. In his second gloss against Feuerbach Marx trenchantly observes: "The question whether human thought can arrive at objective truth is not a question of theory but a practical question (*Praxis*). In practice, man must prove the truth, i.e., the reality, power and this-sidedness of thought. The dispute as to the reality or unreality of thought which is separated from practice is a purely scholastic question." From this it follows that Marx' own ideas must be tested in action and that, more specifically, his theory of history is a method of making history, his economic analysis is a guide to economic action, his reflections on human behavior are clues to controlling behavior. Only after such experimental activity has been performed are we even in a position to say that his ideas were valid because they conformed to the structure of the antecedent situation. For what does it mean to say that an idea conforms to a situation? Taken literally no idea could ever change a situation if it merely conformed to it or duplicated it. An idea conforms to a situation when as a result of acting on it we produce changes in the situation which fulfil the needs out of which the problem arose. For quite literally human needs are part of the

total situation. The denial of activity as the test of truth involves the abandonment of dialectical materialism. The acceptance of the critical nature of informed activity in all thinking makes dialectical materialism self-critical, for it offers it a way of developing itself in the face of new conditions. Engels was fond of saying, whenever the validity of historical materialism was discussed, that "the proof of the pudding is in the eating"; and he would often quote Faust's *Im Anfang war die That* as the beginning of philosophical wisdom. It would be no exaggeration to maintain that the future of dialectical materialism depends on how seriously his words are taken.

HISTORICAL MATERIALISM is the doctrine, given authoritative expression by Karl Marx and Friedrich Engels, that "the mode of production determines the character of the social, political, and intellectual life generally." Although practically all of the work of Marx and Engels dealing with economics and culture may be regarded as a working out of this theory, the writings that are of special importance for an understanding of historical materialism are the following: Marx, *Zur Kritik der Hegel'schen Rechts-Philosophie* (1844), and economic and philosophic manuscripts written in 1844 (first published in *Gesamtausgabe*, pt. i, vol. iii); Marx and Engels, *Die heilige Familie* (written 1844), and *Die deutsche Ideologie* (written 1845-46); Marx, *La misère de la philosophie* (1847), and *Zur Kritik der politischen Ökonomie* (1859); and Engels, *Vier Briefe über den historischen Materialismus* (1890, 1893-94).

As its name suggests, historical materialism differs from all other materialistic interpretations of history in refusing to explain the rise and fall of social systems as an effect of factors which are non-social. Admitting that climate, topography, soil, race, are genuine conditioning factors of social and historical activity it denies that they determine the general character of a culture or its development. The reason is twofold: first, in any given area these factors are relatively constant while social life is more variable; second, there can be no intelligible reduction of the specific qualities of human behavior—exhibited in a social context—to categories of physics and biology. The attempts recently made, especially by Ellsworth Huntington, to recast the geographical interpretation of history suggested by Herder and Montesquieu and more explicitly stated by Buckle in order to show that changes in civilization can be correlated with climatic pulsations and the shifting of climatic zones do not

escape the difficulties which Hegel had already pointed out. Not the slightest evidence has been produced, for example, to show that the climate of Greece from the sixth century B.C. to the first—a period of tremendous social change—varied in any appreciable way.

Historical materialism differs from all other theories which attempt to do justice to the relative autonomy of social phenomena by virtue of the scientific character which it claims for itself; i.e. by its quest for controlling or determining mechanisms. While other theories which seek to discover controlling conditions fail to do justice to the historical character of culture, those theories which have a strong sense for the historical factor, notably idealistic social philosophies of the Christian and Hegelian varieties, fail to indicate the specific mechanisms of social change. Historical materialism rules out idealistic social interpretations by showing that the acceptance and often the genesis of ideas depend upon something which is not an idea, and that ideas themselves when they function as instrumental agencies in a social environment are indirect and sublimated expressions of class interests.

The positive principles underlying the theory of historical materialism may be summed up as follows: (1) Every existing culture is a structurally interrelated whole. Consequently any aspect of that whole—its legal code, educational practises, religion, art or the like—cannot be understood by itself. It must be taken within the context of the system of social energies in which it functions. An analysis of law or a history of law demands more than a mere treatment of legal ideas and their formal interrelation. It was the realization of the organic character of culture and its morphologically determined structure which suggested to Marx his real problem: what factor determines the general style or form of a historical culture? Marx himself in sketching his own intellectual history tells us that as early as 1844 in the course of a revision of Hegel's philosophy of law he had come to the conclusion "that legal relations as well as the forms of the state could neither be understood by themselves nor explained by the so-called general progress of the human mind" (*Introduction to Critique of Political Economy*).

(2) Culture is not only an interrelated whole but a developing whole. The independent variable in the developing social whole will be the explanatory key not only to the causes of change from one society to another but to the

dominant culture pattern existing at any time. According to historical materialism the independent variable is the mode of economic production. This differentiates historical materialism from non-mechanistic social idealism from Hegel down to the present. Hegel had maintained that "political history, forms of government, art, religion, and philosophy—one and all have the same common root, *the spirit of the time*." Marx, on the other hand, contended that all of these cultural phenomena are "rooted in the material conditions of life, which are summed up by Hegel after the fashion of the English and French of the 18th century under the name 'civic society'; the anatomy of that civic society is to be sought in political economy."

The view that the independent variable is the mode of economic production does not deny that the cultural products of economic development react upon that development. Engels' continued insistence upon the category of *Wechselwirkung* was occasioned by charges that historical materialism suffered from a primitive monism according to which all efficient causes in history were material, never ideal. In his letter to Starkenberg (January 25, 1894) Engels writes: "The political, legal, philosophical, literary, and artistic development rest on the economic. But they all react upon one another and upon the economic base. It is not the case that the economic situation is the *sole active cause* and everything else is merely a passive effect. Rather is there a reciprocity within a field of economic necessity which *in the last instance* always asserts itself" ("*Wechselwirkung auf Grundlage der in letzter Instanz stets sich durchsetzenden ökonomischen Notwendigkeit*").

Similarly, historical materialism does not deny the role played by social tradition in modifying the rate of change in the non-material aspects of culture. "The tradition of all dead generations," Marx writes in the *18th Brumaire*, "weighs like a nightmare on the brain of the living." Family relationships, religion, art and philosophy, although they reflect the new social equilibrium produced by changes in the economic order, lag behind both in time and structural form. From the vantage point of a long time perspective the phenomena of cultural lag may not appear significant, but from the point of view of short scale political operation they are of great importance.

(3) By the economic structure of society historical materialists mean "the sum total of the relations of production." The relations of pro-

duction (involving the material powers of production, of which natural raw materials, inventions, existing skills, techniques and knowledge are a part) constitute the real foundation of the whole cultural complex. Historical materialism must therefore be differentiated from the technological interpretation of history, or economic determinism. By the "relations of production" Marx means not the mechanical agencies used in manufacture or the technical organization of the factory but the social relations into which human beings enter or, better still, find themselves whenever they participate in the economic life of society. Property relations are the formal expressions or signs of these social relations of production. These in turn constitute a whole of which technique is only one of the parts. "Machinery," Marx argues, "is no more an economic category than is the ox which draws the plow. Machinery is only a productive force." Indeed it is possible to find societies with different social relations but certain identical productive forces: techniques of tilling the soil were sometimes the same in feudal economies as in slave economies; the use of machinery in the Soviet Union parallels that in the United States. More important still is the assertion of the historical materialist that the very development of technique is not independent but is guided by the needs of a larger social productive whole, of which it is a part. The direction taken today by technical invention, for example, as well as the question whether the invention is to be utilized or scrapped is normally decided not by the spirit of the inventor or the rationale of his creation but by the likelihood of its directly or indirectly diminishing production costs or increasing profits.

(4) The mode of economic production is expressed in certain social relationships which are independent of any individual. Man is born into a society in which property relations have already taken form. These property relations define the different social classes, such as feudal lord and serf, employer and employee. The conflicting interests of these classes flow not merely from the consciousness or lack of it of individual antagonisms but from the different objective roles played by them in the processes of production. The absence of class conflicts, which may often be the consequence of the activity of professional social pacifiers, no more eliminates the real opposition of class interests than the willingness of Negro slaves to serve their masters proves that they were not enslaved.

It is the emphasis on social relations and class

interests that differentiates historical materialism from those doctrines which seek to explain social processes in terms of individual economic self-interest. Marx attacks Stirner in the *Deutsche Ideologie* and Bentham in *Das Kapital* precisely because they conceived man on the pattern of an egoistic and self-centered petty bourgeois shopkeeper who keeps a profit and loss account of his feelings and whose every act is determined by calculation of exclusive, personal gain. The motives which guide individual men are quite various. A member of the working class who voluntarily enlists to fight for his country cannot by the wildest stretch of the imagination be regarded as necessarily actuated by self-interest. The historical materialist is not concerned with individual motives as such. His problem is to explain why certain social ideals prevail at one period rather than at another and to discover what factors determine the succession of ideals for which men live and die. That economic conditions and economic self-interest are two distinct things may be simply demonstrated by showing that the very existence and intensity of egoism as well as the rise of philosophies of self-interest are functions of specific economic conditions.

(5) The division of society into classes gives rise to different ideologies—political, ethical, religious and philosophical—which express existing class relationships and tend either to consolidate or to undermine the power and authority of the dominant class. A struggle for survival goes on in the realm of ideas. Since those who control the means of production also control directly or indirectly the means of publication—the church, press, school—the prevailing ideology is a buttress to the existing order. "In every epoch," writes Marx, "the ruling ideas have been the ideas of the ruling class."

(6) In every social order there is a continuous change in the material forces of production. Sometimes, as in early societies, this change is produced by some natural phenomenon, such as the desiccation of rivers or exhaustion of the soil. Usually, however, and especially under capitalism this change is produced by a development in the instruments of production. At a certain point in their development the changed relations in the forces of production come into conflict with existing property relations. It no longer becomes possible on the basis of the existing methods of distribution of income to permit the productive processes to function to full capacity. Property relations are now recognized

as a fetter upon further social development. The class that stands to gain by the modification of property relations becomes revolutionary. It asserts itself as a political force and develops a revolutionary ideology to aid it in its struggle for state power. Sometimes it masks its class interests in the guise of slogans of universal appeal, as did the French bourgeoisie in the eighteenth century; but at all times its doctrines are patterns of social action and function instrumentally in preserving or overthrowing the status quo. One of the most important tasks of historical materialism is the criticism of cultural and social doctrines in order to discover their social roots and presuppositions, their avowed class values and allegiances and the social direction taken by practical activity in their behalf.

(7) Viewed in the light of contemporary processes all history since the disappearance of primitive communism may be regarded as a history of class struggles. Every class struggle is a political struggle; for the state is an organ of class repression and is never really neutral in class conflict. Every ideal struggle in so far as it bears upon the class struggle has political repercussions and may be evaluated from a political point of view without prejudice to its own specific categories.

(8) The struggle between capitalist and proletariat represents the last historic form of social opposition, for in that struggle it is no longer a question of which class should enjoy ownership of the instruments of production but of the very existence of private ownership. The abolition of private property in the means of production means the abolition of all classes. This can be accomplished only by a victory of the proletariat. Political power is to be consolidated in a transitional period of revolutionary dictatorship, after which the state dies out; i.e. its repressive functions disappear and its administrative functions become part and parcel of the productive process.

Several important problems still await solution at the hands of historical materialists. Chief among them are: (1) What are the specific mechanisms by which economic conditions influence the habits and motives of classes, granted that individuals are actuated by motives that are not always a function of the individual self-interest? Since classes are composed of individuals, how are class interests furthered by the non-economic motives of individuals? The attempt of Dietzgen to solve this problem must be regarded as a failure. Marx makes some suggestions which

point in the direction of an objective socio-behavioristic psychology. (2) The statement that economic conditions "in the last instance" determine social life or that they are "the real foundations" of society implies a theory of measurement. So far, however, no theory of measurement for the social disciplines has been evolved. That their explanatory categories and units of measurements must be different from those of the physical sciences seems clear. But this alone is not sufficient. (3) If it is true as Marx states in *Das Kapital* that in changing his external environment man changes his own nature, then human nature under ancient slavery must have been different in some respects from human nature under modern capitalism. But if this is so, how is it possible to understand past historical experience in the same way as we understand present experience, since understanding presupposes an invariant explanatory pattern? That is a problem which confronts not only historical materialism but all philosophies of history; this is, however, no valid reason for avoiding it. (4) To what extent are chance events to be admitted as operating forces in history? Most historical materialists have contended, like Pokrovsky, that "to appeal to chance in history is to exhibit a certificate of poverty." Both Marx and Engels were more cautious. In a letter to Kugelmann on the Paris Commune (April 17, 1871) Marx goes so far as to claim that for some specific and local issues chance may be a decisive factor. Engels with his eye on long range tendencies admits the presence of chance phenomena but holds that their influence is compensatory, with the result that in the final account they cancel one another. The difficulty with the question of chance seems to be that a great many critics as well as disciples of Marx define chance events as absolutely uncaused events instead of events that are historically irrelevant. From the point of view of the historian only those are chance events which he cannot draw within the circle of his social explanation, although each of those events may be strictly determined from other points of view. If one denies the existence of even relative chance in history, then historical materialism becomes a variant of either one of two doctrines: a degenerate Hegelian idealism whose organic determinism implies that if anything had been different, everything would have been different; or a fatalistic mechanism which holds that there is no genuine novelty in the world and that future social changes are already predetermined by the atomic configurations of the primordial slime.

(5) Is the truth of historical materialism itself historically conditioned or is it valid for all history, past and present? Both Marx and Engels declared that its truth was relative only for class societies and that consciousness of the conditions of its truth would lead to action which would abolish class society. Does this mean that "the leap from the kingdom of necessity to that of freedom," the phrase with which Engels describes communism in *Anti-Dühring*, implies a paradise in which man escapes the limitations of his earthly fate? There is no warrant for the belief that historical materialism justifies any such historical apocalypse. The freedom of which Engels speaks is the freedom of man to make his own social history on the basis of the natural necessities always present. That he will be in a position to make history at all will find its explanation in some form of materialism; but the kind of history he will choose to make out of the many possibilities which are given will be irreducibly and uniquely an expression of his own nature.

SIDNEY HOOK

See: PHILOSOPHY; LOGIC; NATURALISM; REALISM; ETHICS; SOCIALISM; IDEALISM; MECHANISM AND VITALISM; ORGANISM, SOCIAL.

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is a pronounced trend toward governmental intervention in the metal industries in an effort to equalize international disparities.

ALFRED MARCUS

See: MINING; MINING ACCIDENTS; MINING LAW; COINAGE; GOLD; BIMETALLISM AND MONOMETALLISM; IRON AND STEEL INDUSTRY; MACHINES AND TOOLS; TECHNOLOGY; INDUSTRIAL REVOLUTION; COMBINATIONS, INDUSTRIAL; CARTEL; RAW MATERIALS; NATURAL RESOURCES; IMPERIALISM.

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MÉTAYAGE. *See* FARM TENANCY; PEASANTRY; SMALL HOLDINGS.

METHOD, SCIENTIFIC. The progressive character of science shows that its essence is to be sought not in the content of its specific conclusions but rather in the method whereby its findings are made and constantly corrected. The term method denotes any procedure which applies some rational order or systematic pattern to diverse objects. As used with reference to science, its meaning varies from that of abstract, or formal, logic applicable to all statements to that of the technique which may be peculiar to a particular science or even to some special field in it (e.g. the method of just perceptible differences in psychology or the method of index numbers in economics).

This distinction makes it possible to eliminate current but needless methodologic controversies by recognition of the fact that the social sciences differ from one another and from the physical sciences in regard to their techniques while they all agree as to their general logic as sciences. It is well also to recognize that while in its oldest and widest sense the term science (like the German *Wissenschaft*) denotes all ordered and reliable knowledge—so that a philologist or a critical historian can truly be called scientific—the stricter sense of the word science makes it especially concerned with general laws which establish connections between diverse facts. The various sciences thus differ in the degree of generality which they have attained.

From the widest viewpoint scientific method may be regarded as the way of increasing the reliability of beliefs or assumptions by eliminating or minimizing as far as possible the errors and illusions which obstruct human knowledge. Science aims at stability of belief by cultivating rather than suppressing doubt. In constantly asking "Is it so?" it seeks to question all that can possibly be questioned. The mere resolution, however, to doubt all things is of little efficacy, as the illustrious case of Descartes shows. What is most in need of doubt is apt to appear as indubitable (e.g. innate ideas). There is needed therefore a technique for questioning every proposition so that a wider or more stable basis for the whole system of beliefs may be found.

Logic and mathematics are such techniques in that they show possible alternatives to usual ideas. The techniques for raising doubt as to assumptions concerning individual facts consist in showing possible contradictions between one factual assumption and another. To do this effectively we repeat the observation of what are supposed to be the facts, either under the same conditions or under varying conditions, so that distorting influences may be eliminated. Modern physical methods are thus used not only to make observations more accurate, that is, to obtain a refinement of perception unobtainable with the unaided senses, but also to prevent the common illusion of seeing what does not exist. In the case of facts not directly observable one relies on the method of questioning the evidence in their favor.

The foregoing considerations may thus be put positively: science is a method of basing beliefs on the best available evidence. Logical proof or demonstration, not only in geometry

and arithmetic but in all the fields of science, reduces possible doubt as to a large number of propositions to that of a few simple principles. The proof of a proposition makes it impossible to deny it without denying the axioms and other propositions from which it is deduced.

From the nature of evidence it is clear that no one fact can prove another fact unless the two are connected by some constant or invariant relation. Scientific method is thus an effort to make explicit, and to test, the laws according to which phenomena are related to each other to form a system. A dictionary or a railroad time table is not generally regarded as a work of science. For the latter must be more than a collection of facts, even if they be organized according to some external order, such as the alphabetic or chronologic one. The ideal of science is to see the facts logically connected according to their essential nature, summarized in some small number of connecting laws or principles.

Thus far scientific method has been considered as a way of perfecting knowledge. Is it also a way of extending knowledge? If an affirmative answer is given, the obvious caution must be added that there are no magical rules which will enable man to discover all that is unknown—no more than there are rules enabling him to invent everything that he needs or to create great works of poetry or music. If there were such rules, he would long ago have discovered the causes of phenomena which for ages have puzzled and baffled. The verifiable history of science shows that there is an element of unpredictable good fortune and unaccountable genius in most great discoveries.

But while there are no rules or methods which will produce scientific discoveries or inventions, there are certain necessary conditions which must be observed in order not to make the effort at discovery impossible. Previous knowledge and reflection are such necessary (though insufficient) conditions. Great scientific achievements are never made by those who start with an open mind without any knowledge or anticipation of nature. In order to find something we must first look for it. And the process of formulating new hypotheses or new experiments to test old hypotheses, while it requires original insight, is necessarily dependent on logical deduction from previous knowledge. Deduction is thus a necessary part or instrument of research.

Confusion on this point has resulted from the Baconian myth of induction according to which

the true scientist begins with the observation of the facts without any anticipations of nature. It is important to realize that this is logically impossible and belied by actual history. Without an anticipatory idea or hypothesis we do not know what specific facts to look for and cannot recognize what is relevant to the inquiry. It is not easy to start with observing the facts, for to determine what are the facts is the very object of scientific inquiry.

While logical analysis or deduction can assure true conclusions only if we start with true premises, it aids scientific research and discovery in three ways. In the first place, it helps in detecting the questionable assumptions logically involved in what is believed to be the truth, and it multiplies the number of available hypotheses by formulating the possible alternatives to those which have been tacitly assumed. Logical reflection is needed to liberate one from the habit of regarding the familiar as the only possibility. In the second place, the logical deduction of its consequences makes clear the meaning of any hypothesis and thus assists in the process of testing or verifying it. Finally, the process of rigorous deduction is an aid in the attempt to steer clear of irrelevancies, and thus when the right principle is found it serves as a key to unravel our puzzles. This explains the great fruitfulness of mathematics in physical research. Such predictions as that of conical refraction by Hamilton, that of light pressure and electric waves by Maxwell and that of the bending of light rays and certain shifts in the spectrum by Einstein are a few striking instances of physical discoveries induced by purely theoretic consideration.

When in 1903 Bertrand Russell asserted that induction was more or less methodical guesswork, the intellectual world was rather shocked. This reaction was due to a false pride which makes people dislike to admit that guessing can be a part of scientific method. Nevertheless, such is clearly the case, whether the guess be called an intuition, an anticipation of nature or a working hypothesis. Scientific guessing is distinguished, however, by its methodical character, by the fact that it is recognized as a guess and that there is an organized way of testing its chances of being true.

The simplest form of induction is that of generalization from instances which are judged to be typical or representative of the classes to which they belong. Thus, if a certain serum cures X, Y and Z who suffer from pneumonia,

there is a temptation to generalize that this serum is a cure for all cases of pneumonia. This is an inference which has greater or less probability according to the homogeneity of the class of cases called pneumonia. In physical nature, where uniformities are simpler and more readily observable, a single test as to whether or not a new organic compound is acid will be sufficient. In human affairs, where heterogeneity is very great, it is more difficult to determine to what extent certain instances are representative or typical of a special variety rather than of the whole class. It is thought, for instance, that because fifty or one hundred Jews or Chinese have certain characteristics, all the others have them. But here one is obviously laboring under the difficulty of having unknowingly selected some special group, such as those belonging to a special society engaged in a special industry or coming from a special geographic region. Hence to increase the reliability of inductions, as many instances as possible are taken at random; that is, distributed over wide ranges. In this way it is hoped that the fallacy of selection will be eliminated; that is, that the sample will be characteristic of the whole class rather than of some unrecognized variety. But no generalization can escape the possibility of being false or inadequate, because it is based on observed conditions which are themselves conditioned by unobserved ones which may change with time. The so-called principle of the uniformity of nature, or the maxim that like effects are brought about by like conditions, cannot do away with this difficulty, which arises from our limited knowledge.

The logically unsatisfactory character of mere generalization from samples or instances was recognized by Bacon, and methods of overcoming it were elaborated by J. S. Mill under the head of the methods of agreement, difference and concomitant variation. Mill, however, did not clearly discriminate between induction as generalization—"finding the causes"—and the element of proof. As direct prescriptions for discovering the causes of things these methods are, as the history of science shows, of little practical worth. For the very way in which these methods are formulated indicates that unless the causal "circumstance" is already included in the relevant factors, it cannot be discovered by any of these methods. These methods are, however, valuable in eliminating proposed causes. Thus the method of agreement shows that if a proposed cause is not a uniform antecedent it must

be rejected. The method of difference indicates that if a factor is not a differential one (one that is present in all instances when the phenomenon is present and absent in all instances when the phenomenon is absent) it is not a true cause. Finally, the method of concomitant variations proves that if two factors do not vary concomitantly they are not causally related. These methods of induction thus neither prove nor directly discover laws but they show which of a number of alternative hypotheses can be best verified.

It is principally in connection with the method of concomitant variations that statistics are useful in the establishment of laws or causal relations. Of course no empirical correlation can establish necessary relations. Indeed high correlations may often be discovered between factors which cannot have any real direct connection. But the establishment of correlations helps to confirm some hypotheses, and its failure helps to disprove others. For this reason it is a fallacy to suppose, as is often done today, that any developed science can remain in the statistical stage. Physics is not satisfied with empirical formulae, but always seeks to deduce them from some general principle, thereby establishing some real identity or invariant relation, e.g. the constancy of the amount of energy in all physical transformation. Thus what is called statistical mechanics is not empirical at all, but is rather a mathematical deduction from certain assumed relative frequencies of various minute configurations in nature.

In passing from scientific method as a whole to scientific method in the social sciences it is well to begin with the general admission that social phenomena are dependent on physical, biologic and psychologic factors. From this it follows that social phenomena are inherently more complex, depending on a larger number of variables. Hence the postulate of determinism, that everything is governed by law, does not assure the discovery in the social field of such relatively simple laws as prevail in physics. For obvious subjective and objective reasons experiments on men and societies cannot so readily be made or repeated as can experiments on samples of inert carbon or hydrogen. The former cannot be observed with the same degree of freedom, accuracy and detachment as the latter; and in the social field it is impossible to vary one factor at a time and to be sure that the others have remained the same.

In addition to these differences it is important

to note that the temporal or historical factor enters into social phenomena to a much larger extent than into purely physical phenomena. Men, communities and customs grow; and the present complexion of such entities is a function of their past history, to an extent which is not true of physical entities. There are, to be sure, certain physical phenomena, such as hysteresis in magnetism, in which the past enters. But these are exceptional cases, whose dependence on history is expressible in a relatively simple function. This is certainly not true of religious, moral and political affairs: more history is needed for an understanding of the reaction of a Bulgarian to a Serb than for an understanding of the reaction of water to an electric current.

Because different peoples have had different histories it is hazardous to compare the institutions of one with those of another. In order to overcome this difficulty men like Comte and Spencer have resorted to the arbitrary hypothesis that all peoples must go through the same series of stages in their history and that therefore different peoples may be compared in the same stage of their development. But such oversimple a priori hypotheses are not supported by the facts of history or anthropology. The supposed law that all peoples must go through the nomad, or pastoral, stage before reaching agriculture cannot be true of peoples like the Peruvians, who never had a sufficient supply of cattle; and the supposed law that the matriarchal form of family must precede the patriarchal form is freely disregarded by tribes like those of British Columbia, which for social reasons of their own have veered in the opposite direction. A good deal of the work of men like Montesquieu must be rejected, on the ground that we cannot significantly compare the institutions of diverse societies which are not similarly organized. For this reason it is also hazardous to interpret puzzling phenomena as survivals of practises which were once rational in purpose. What seems simple and rational to an outside observer may not be so to those whose lives are bound up with it, and vice versa.

Nineteenth century writers did in fact stress the historic approach in the study of law, economics, politics and religion—even in art and philosophy. But it soon became obvious that no significant history can be written unless it is assumed that events are connected in certain ways, and this means an avowed or tacit theory of social causation. In geologic history the assumed principles of physical causation are

explicit and subject to direct experimental or differential observation. In social history the assumed principles of economic, political or social causation are apt to be tacit, but they are none the less operative in determining what are regarded as the facts, certainly in determining what are regarded as the leading and most significant facts. For no history can record everything, and what is selected is determined by the theoretic point of view. Intelligible history, then, presupposes theories of economics, politics, psychology and the like.

The distrust of pure theory comes also from those interested in the practical manipulation of present social situations; for purely abstract study affords an insight only into certain phases of life and does not provide the complete knowledge needed for determinate choices. Thus theoretic economics tells only what would happen under certain conditions if all other factors remained the same. Those, however, who begin with the study of concrete phenomena cannot make any prediction except on the assumption that certain conditions are bound to have certain results; that is, on the assumption of certain laws as to what is possible. Their theory is thus tacit rather than critically examined.

A more rational ground for the distrust of pure theory in the social field is the fact that every investigator feels free to use his own categories. If these are expressed in common words, all sorts of ill defined penumbras of values and meaning are attached to them and clarity becomes difficult of attainment. There can be no generally recognized set of categories expressed in technical terms without more attention to the purely logical problem of the relation of the various fundamental social categories to each other. But the search for a set of elemental categories in the social sciences, such that all others are combinations of them, is a long process which no one can hope to complete in a single lifetime. There are therefore bound to be as many sociologies, or sets of social laws, as there are sociologists, each of whom starts afresh because his predecessors have not demonstrated anything which he is bound to take into account.

There are thus two main schools of method in the social sciences. On the one hand, there are those who, like the mathematical or theoretical economists or those engaged in juristic theory, are willing to start with purely abstract rules or formulae, develop them rationally and correct them by other considerations so that the results fit the actual course of events. On the

other hand, there are those who follow the historical and descriptive approach, which begins with ordinary notions and tries to refine them more and more by making them more definite, removing contradictions and supplementing them by fruitful analogies or comparisons.

It is often wise to begin by concentrating on what seems a typical instance or to pay special attention to a single case in which some essential social relation may be studied. We can thus, like the followers of Le Play, study the interplay of economic and other social factors by taking some cultural or geographic unit, e.g. a river valley. American anthropologists, following Boas, have used the concept of the culture area to great advantage. Instead of studying the American Indians as a whole, they take a special group and trace the pattern of its communal activity.

Such intensive study of special cases can obviously be fruitful only when they are in fact typical and when the student brings to his task a wide knowledge and a penetrating analysis of the relevant factors. The mere accumulation of particular facts is not and cannot of itself be enlightening nor can it widen scientific vision.

There has been considerable heated controversy as to whether the normative, or teleological, point of view is legitimate in the social sciences. This, however, involves two separate questions. The first is whether the investigator should pass judgment on events or social institutions on the basis of his own set of values. To do so is to introduce the investigator's personal preferences where what is needed is a study of the social objective. On the other hand, it is so difficult for most people to suppress their own evaluation of social situations—those who have preached this course, like Duguit and Gumpowicz, have failed to practise it—that it may be better to be frankly subjective than to pretend to an objectivity one does not really have. The right path obviously depends upon the investigator's equipment. The second question is whether social phenomena are determined by the purposes men have in mind or whether the latter are largely illusory or mere registrations of what objective circumstances determine men to do. Here as in other controversies the antithesis is too sharply drawn. If conscious human purposes are organically conditioned, there can be no good reason for ignoring them as clues to the whole social process. All social acts are regulated, and most men sometimes deliberate upon, and often ask, what

is the proper aim to be followed. Thus language, clothing, the ritual of business, courtship and even leave taking of the dead are regulated by social custom in such a way that a knowledge of social purpose is certainly needed for a full understanding of what is going on. On the other hand, men often take a microscopic view of their own conduct, while the social investigator must take a macroscopic view. The man who marries and brings children into the world does not usually aim at increasing the national population or the voting strength of his religious group. Men also are undoubtedly under serious illusions as to their purposes in their action and as to the extent to which the latter is really as planned as their vanity makes it out in retrospect. Men do calculate and make mistakes. But the extent to which this is true is an empirical question to be determined by actual measurement and not to be affirmed or denied *a priori*.

Until recently scientific method has been studied mainly by logicians interested exclusively in the nature of individual thought. One may, however, ask why it is that men who are careful thinkers in their specialty (e.g. in physics) are generally no better than the rest of the community when they reason about religion, politics or social and domestic economy. This suggests that scientific method is a trained and specialized habit which like all trained habits is socially conditioned. There is doubtless some organic basis for the fact that men put more of their intellectual as well as of their other energies and attention into some one field. But there can be no doubt that social organization largely determines the special or professional standards of care which are required in different fields of learning. Thus it is habitual for physicists and chemists to distrust naked observations and to resort to various mechanisms, repetitions and mathematical calculations to establish their facts; for biologists to use controls to check their experiments; for philologists to verify their quotations and references; or for lawyers to establish the relevance and competence of testimony. These cautions are organized so that no one can omit them and maintain his professional standing. Sometimes indeed these habits become mechanical. We forget their rationality and oppose any extensions or improvements of them which men of genius discover; but the merits of these progressive extensions are bound to be recognized so long as science by its fundamental procedure remains a self-corrective system.

Scientific method is generally thought of as peculiar to recent western civilizations. This view has been supported by sensational reports about weird, magical religions and cosmological beliefs of primitive peoples and even of mediaeval Europe, as if similar beliefs could not also be found among those called civilized. Contemporary anthropologists have, however, shown the wide prevalence of careful technical knowledge which is deliberately cultivated among most primitive hunters, fishermen and artisans as well as among priests and medicine men. Thus many peoples, like the ancient Chinese, indicate a deliberate study of how to prepare for certain modes of warfare. When, however, one compares the cumbrous learning of Egypt and other oriental countries with the rational science which the Greeks discovered from the days of Thales and Pythagoras to those of Archimedes and Ptolemy, one can well say that scientific method is a Hellenic discovery or invention, in the sense that the Greeks discovered the way of strictly logical demonstration, thereby using simple and comprehensive principles to transform vast conglomerations of miscellaneous facts into ordered systems. This is connected not only with the aesthetic sense of the Greeks but also with their habits of free society. Free doubt and free inquiry naturally go together with freedom from paralyzing fear or awe of authority. Oriental treatises are generally the stark dicta of masters to submissive disciples. The Greeks characteristically wrote dialogues, reasoned arguments or communications to friends. In any case the Greeks certainly discovered and developed mathematics as the art of proving general theorems.

Modern science is frequently not as rigorous in its procedure, but it has greater facilities for cooperation in its search. Modern methods of investigation depend upon a vast system of learned societies, communications and publications which make the results of any man's research very soon available to all others interested. Also through numerous records and libraries different generations can utilize such work of their predecessors as did not find immediate application.

While it is generally recognized that modern technology is the outcome of the development of scientific method, the reverse is also true in a limited way. Abstract mathematics has been enlarged by application to the problems of physics and the latter has been enriched by facing the problems of engineering. In the theoretic mechanics of Galileo there is an acknowl-

edgment of his observations of the methods followed by the expert workers in the Venetian arsenal; and the ideologists of the present Soviet regime in Russia are emphasizing the technological as well as the economic development which conditioned the work of men like Newton. In reply it might be urged that the history of medicine and technology shows that interest in practical applications does not always advance scientific methods and indeed that experimentalists of a very high order of rectitude, like the late Professor Michelson, were afraid to go into any field of physics having immediate practical applications. But waiving the latter point and admitting that scientific method may be enlarged by practical applications, one must still be on guard against confusing questions of historic conditions with those of the logical content of a book like Newton's *Principia*. In any case there can be no reasonable doubt that the latter was molded by the reading of Euclid and Pappus as well as of Kepler and Galileo.

In raising the question as to the social needs which make for scientific method it is well to recognize at the outset that the suspension of judgment which is essential to the latter is difficult or impossible when the demands of immediate action are pressing. When a house is on fire, its owner must act quickly and promptly; he cannot stop to consider the possible causes or even to estimate the exact probabilities involved in the various alternative ways of reacting. For this reason those who are bent upon some specific course of action often despise those devoted to reflection; and certain ultramodernists seem to argue as if the need for action guarantees the truth of one's decision. But the fact that a person must either vote for candidate X or refrain from voting does not of itself give him adequate knowledge. The frequency of regrets makes this obvious. Wisely ordered society is therefore provided with means for deliberation and reflection before the pressure of action becomes irresistible. In order to assure the most thorough investigation all possible views must be canvassed, and this means toleration of views which are *prima facie* most repugnant.

In general the chief social condition of scientific method is a widespread desire for truth strong enough to withstand the powerful forces which make people either cling tenaciously to old views or else embrace every novelty because it is a change. Those who are engaged in scientific work need not only leisure for reflection and material for their experiments but also a com-

munity which respects the pursuit of truth and allows freedom for the expression of intellectual doubt as to its most sacred or established institutions. Fear of offending established dogmas has been an obstacle to the growth of astronomy, geology and other physical sciences; and the fear of offending patriotic or respected sentiment is perhaps one of the strongest hindrances to scholarly history and social science. On the other hand, where people indiscriminately acclaim every new doctrine, the love of truth becomes subordinated to the desire for intellectual novelties. The safety of science depends on the existence of men who care more for the justice of their methods than for the value of any results obtained by using them. For this reason it is unfortunate when scientific research in the social field is largely in the hands of pedagogues and others who are generally not in a favorable position to oppose established or popular opinion.

These reflections may be stated in another way: the physical sciences can be more liberal because there is more certainty that foolish opinions will be readily eliminated by the shock of facts. In the social field, however, no one can tell how much harm may come of foolish ideas before their foolishness is finally, if ever, demonstrated. None of the precautions of scientific method can prevent human life from being an adventure, and no scientific investigator knows whether he will reach his goal. But scientific method does enable large numbers to walk with surer step. By analyzing the possibilities of any step or plan it becomes possible to anticipate the future and adjust oneself to it in advance. Scientific method thus minimizes the shock of novelty and the uncertainty of life, so that man can frame policies of action and of moral judgment fit for wider outlook than those of immediate physical stimulus or organic response.

MORRIS R. COHEN

See: SCIENCE; PHILOSOPHY; LOGIC; DETERMINISM; ECONOMICS; POLITICAL SCIENCE; PSYCHOLOGY; SOCIOLOGY; ANTHROPOLOGY; JURISPRUDENCE; HISTORY AND HISTORIOGRAPHY; STATISTICS; PROBABILITY; CORRELATION.

Consult: Aristotle's *Works*, tr. by J. I. Beare and others, and ed. by J. A. Smith and W. D. Ross, 11 vols. (Oxford 1908-31), especially vols. i, iv, v and x; Eucken, Rudolf, *Die Methode der aristotelischen Forschung* (Berlin 1872); Grabmann, Martin, *Die Geschichte der scholastischen Methode*, vols. i-ii (Freiburg i. Br. 1909-11); Bacon, Francis, "Novum organum" and "The Advancement of Learning" in *Philosophical Works*, tr. by R. L. Ellis and James Spedding, and ed. by J. M. Robertson (London 1905) p. 256-387, and p. 39-176, 413-638; Descartes, René, *Discours*

MORALES, AMBROSIO DE (1513-91), Spanish historian and archaeologist. Morales, who became a cleric, received a humanistic education at the universities of Salamanca and Alcalá and taught at the latter institution. His erudite dissertations, polemics and other writings cover linguistic, hagiographical, archaeological and historical subjects. Morales was very devoted to Philip II, who appointed him royal chronicler in 1563 and provided him with all facilities for the consultation of documents. His historical writing is characteristic of the interest of the Iberian peoples, inspired by the Renaissance, in the investigation of their ancient history and achievements. Morales' principal work is the continuation of Florián de Ocampo's *Corónica general de España*; like Ocampo, he identified Spanish antiquity with Roman history, and beginning with a discussion of the social conditions under the republic he carried the account from the midst of the Punic Wars to the termination of the Leonese monarchy with Bermudo III. He lacked feeling, animation and artistic sense, but he was more critical than Ocampo both in the choice of sources and the appreciation of events. His chief claim to originality lies in the great importance he assigned to such non-literary sources as geography, archaeology, epigraphy and numismatics. While he gave considerable attention to ecclesiastical history and hagiography in the chronicle, Morales displayed to a marked extent the awakening interest of scholars in facts of everyday life which appeared in his period; illustrative of this attitude are his panegyrics on the Castilian language.

FIDELINO DE FIGUEIREDO

Works: Ocampo's *Corónica general de España*, continued by A. Morales, 7 vols. (Alcalá 1574-86; new ed., 10 vols., Madrid 1791-92, of which vols. iii-x are by Morales); "Discurso sobre la lengua castellana" in *Las obras del maestro Fernan Perez de Oliva*, ed. by A. Morales (Madrid 1586); *Apología en defensa de los Anales de Gerónimo de Zurita* (Saragossa 1610); *Viaje de Ambrosio de Morales* (written 1573; ed. with notes and biography by Henrique Florez, Madrid 1765).

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MORALS. Until rather recent times morals were not distinguished from manners. Together with ceremonials they were techniques of behavior believed to be efficacious in securing

goods and averting evils. They were judged by identical standards as right or wrong. In the course of time, manners came to be identified with techniques recognized to be manifold, changeful and contingent; morals with a system presumed to be single, unchanging and necessary. They were called and they still are in certain quarters not morals but *morality* and were ascribed to universal principles of right conduct endemic to mankind.

The pluralization of morality into morals follows upon the recognition that morality also consists of manifold, changeful and contingent techniques of conduct. Considered thus morals so largely overlap manners, folkways, mores, law, ethics and public opinion that only convention or fiat decides where these others leave off and morals begin. Contemporary opinion tends to confirm William Graham Sumner in distinguishing folkways and customs as group habits; law as such habits found or ordained, but enforced by police power; ethics as a corpus of rules derived by reflection upon morals; and morals themselves as "the sum of taboos and prescriptions in the folkways by which right conduct is defined."

"Right" is the differentia of the moral. A term of selection, it designates group approval as against group disapproval and implies instrumentalities to enforce the approved and to punish the disapproved. The character of the coercive agency decides the classification of the conduct involved. If that be political, the "right" thing is a matter of law; if ecclesiastical, a matter of religion; if public opinion, a matter of use and wont, convention or fashion. Occasionally the "right" thing is the same for all institutions. Oftener there are conflicts; distinctions are at work. People are described as morally bound and legally free, morally guiltless and legally responsible, moral victors and actual losers, and vice versa. Very widely morals are identified with sexual habits, "moral" and "immoral" being so much identified with sex conduct that bad citizens and unscrupulous business men are condoned as "good husbands and fathers."

So great is the diversity of patterns and principles of conduct that actually comes under the scope of morals that it is impossible to analyze the subject matter scientifically on the basis of a single rule or formula. Even the biological "instinct of self-preservation" fails to embrace all morals, since there are societies—as in China or Japan—which require suicide in certain contingencies; and all societies require murder and

self-immolation in war times. Nor is the survival of the community as distinguished from the survival of its members an adequate criterion, since—as always under the Buddhist or Christian monastic rule and occasionally in the moral economy of every society—ways of life are required which undermine the health and stunt the growth of the community. “Right” does not apply to the function of conduct but to its form. Regarded from the standpoint of vital function morals are secondary and tertiary characters, related to primary ones, often as certain phases of instinctive behavior in insects are related to insect survival or as the plumage of peacocks, pheasants and birds of paradise is to the actual conditions of the birds’ lives. They are cancer-like excesses of vitality, stereotyped, and not only add nothing to vital function but often actually conflict with and nullify survival. The rules of kinship and marriage among primitives and Catholics, the rules of property among moderns, express formations of this kind. Together with other moral forms they present themselves as divergent and stereotyped patternings of activity starting from one or more of the primary drives of the psychophysical organism.

Explanation of morals in terms of use is necessarily forced and artificial. They appear to be rather configurations built up as reveries and dreams are built up by a sort of self-pyramiding upon a dynamic affectional ground and a dynamic situational content which carry them as woman’s body carries stays and bustles and ruffs or a soldier’s body carries a uniform. As Huxley observed: “The notion that the doctrine of evolution could furnish a foundation for morals, seems an illusion.” Whatever accidental experience morals begin in, their growth and survival are not due to natural selection and superior fitness.

In morals function follows form rather than form function. To the determinants of both which men share with animals must be added memory, imagination and speech. “Right” conduct, the correct manner of obtaining good and avoiding evil, is postulated upon an imaginary, unseen world of gods and ghosts and demons and upon a living past as well as upon the social and natural environment. “The necessities of life,” which are at the core of all goods and evils, are believed contingent on all three realms. Necessities are not such through being indispensable to survival; for example, air is, but even in these days of elaborate ventilation sys-

tems air, unlike people and property, is a good whose winning has not yet brought forth moral laws.

A “necessity” enters morals when it is consciously desired or rejected, pursued or avoided by a group. Foodstuffs and sex objects, clothing, shelter, defense against diseases and enemies, are such necessities. Consider primitive customs and codes: Australian tradition, Aryan sutras, Israelitish commandments, are alike meticulous concerning what to eat and what not to eat, how to secure it and prepare it, in what company to eat and so on. Cannibalism, which is a horror to us, has been a felt vital necessity to more than one ancient people, since it is based on the belief that men are what they eat and that to eat the strong, the great, the wise, is to become great, strong and wise. The belief persists, passing, with the growth of communities in well being and security, through a series of mutations. First, cannibalism as the nourishing of men upon human flesh is replaced by human sacrifice, which is nourishing ghosts and gods on human flesh. Human sacrifice was indeed so common in antiquity that it is a boast of Aristotle that the Greeks no longer practised it. The transformation is completed where the material sacrifice becomes imaginative and ideational; instead of men eating men or gods eating men, men eat gods. The Eucharist is the current descendant in the direct line of the primitive cannibalism. The prescriptive dietary systems of Todas, Jews, Brahmans, Mohammedans, with their clean and unclean foods, exemplify the more positive elaboration of the same process in selecting and defining “right.” In free society the necessity has lapsed and diet has become a matter of manners.

Codes deal similarly with the biological crises and conditions of the personal life—birth, puberty, menstruation, cohabitation, marriage and divorce, association with others. They regulate contact and communication between the sexes, between the generations, between the castes, between the outsiders and the insiders.

Dress and decoration, themselves derivatives of the nutrition and sex complexes, also fall under rule: codes prescribe how hair shall be worn; how a person shall be marked and dressed for hunting, fighting, courting, marrying, burying and for contact with ghosts and gods. Except among the military and ecclesiastics such rules have dropped to the level of manners. But practically until the industrial revolution they were momentous moral principles.

Sex rules exhibit analogous conditions and processes. In many quarters morality has become synonymous with a certain prescriptive form of sexual life. Now psychoanalysis has called attention to persistent incestuous trends in family life in the form of the "Oedipus complex." Incestuous practises are still much commoner in Europe and America than many like to recognize, but they are condemned with greater horror than homosexuality, sadism or masochism. Among native tribes in South America and Australia, however, exogamy may be prescriptive, yet incestuous and promiscuous relations are commonplace. Fear of menstrual blood is expressed by tabus not only against cohabitation but against contact with menstruating women. Often a whole sexual economy is postulated upon a presumable danger to the male from the blood of the female of the species.

Consider, again, the status of woman. Anthropologists point to existing matriarchal orders and to the vestigial matriarchies of all societies. For some reason, perhaps the discovery of the role of the father in procreation joined with the feeling of security accompanying the settled routine of an agricultural economy, women and children became valuable farming tools. Instead of being individuals within the undifferentiated community of the tribe they became personal to the adult male. Women thus took on the character of property: sold by the father, bought by the husband, with their functions standardized and limited. As civilizations grew more complex, women ceased to be valued for their skill. Their untouched femininity alone counted. How and when the woman's virginity becomes an asset to the man who marries her and consequently important to her cannot be told. The organic connection between sexuality and religion indicates that the fertility of women and the fertility of earth and beasts were held bound together. Sometimes women became priestesses of the life renewing divinity, with the duty to receive the seed of every man who came to the temple to offer. At other times they became guardians and conservators of the sacred, creative, life giving fire of the hearth and hence might know no man whatsoever. Holy women like the vestal virgins are of a later growth than holy women like the temple prostitutes, the priestesses of Diana, or the Great Mother and the like. The institution of the Vestals registers the fact of women having become property. *Virgo intacta* is a proprietor's conception. In the course of time virginity becomes a rule of

"right" conduct for all women of the western world. Motherhood indeed is absorbed in virginity, and the maiden who became the mother of antique religion is transformed into the mother who stayed maiden of the Christian cult: Mary, Mother of God and Virgin still.

Considering non-human property, the growth, elaboration of, and struggles to abolish property distinctions seem to provide one of the most interesting phases of moral history. Property relations are preeminently the subjects of the most heated moral controversies. Possessions are with difficulty distinguished from personality. Amid the simple native communities of Australia and the Americas the sense of personality extends hardly beyond the skin. Husbandry or hunting may be practised alone or with companions; production of any sort may be private or cooperative; but consumption is always communal. Hunter and husbandman share catch and crop with their fellows. Their tools are personal when employed but communal *in potentia*. The "Indian giver" is one who understands ownership as use; the unused object may be asked back if need arises. In such circumstances private property could hardly be a focus of moral regulation. It enters morals where personality has begun to extend beyond a man's skin, where such extension has become static rather than functional. It is in evidence in agricultural economies where the father figures as the master of the family. First, it seems limited to the winnings of his personal prowess—his women, his children, the immediate work of his hands. Land long remains communal. Its individualization has been intermittent and for the most part incomplete. "Public" has been made "private" and private public, with a marked tendency to recognize the "right" of eminent domain.

One group's virtue, to sum up, can be another group's sin. Obeying the Ten Commandments or following the gospel of Christ or of Marx may be beatitude or turpitude. Rules of right conduct begin in accident and obtain contingently. A perception with little or no objective relation to the vital economy may have a profound emotional one, stirring personality to its depths, so that nuclear drives are reanimated and the perception becomes a focus of simultaneous appetitions and evasions. Or, conversely, a perception inwardly determined by hunger contractions, glandular pressure, circulatory conditions, their ideomotor correlates and the like operates like a magnetic pole whose lines of

force attract some and repel other objects, distributing the former in a definite pattern around their cores. Morals present a fair analogy to such processes, whether they are responses to external stimulation or to action initiated within. Chance behavior forms in their beginnings, emotion fixes them in memory, imposes their repetition and verbalization. The latter refine and polish the original action pattern; the action pattern reawakens the emotion in which it was set off. The initiative perception behind moral responses disappears from remembrance. The responses survive—the action compulsive, the feeling that of conformation to force.

Stated in words, the action is now a "moral law." The generations transmit it, the older infecting the younger with the feeling which the formula sustains. Since the originative force is forgotten, another origin is automatically attributed. And all attributions seem to be summed up in the formula: "It was Father's way"—*mos majorum*. Where societies are complexes of lesser groups, the importance of the fathers seems neutralized. *Mos majorum* ceases to be their way: it becomes a way which an original father of fathers, a king, a god, reveals as his will for man. *Mos majorum* bifurcates into custom and code. The moral code is the will of God. It embodies sanctions—promises of reward and threats of punishment—since its ordinances prescribe behavior forms constantly subject to variation and lapse. Where the code, first imposed and then accepted, is acknowledged by the general sentiment it becomes a community's ideal and expectation, the "spirit" of the people or the times, glorified as "the moral law." In such situations, the consequences of conformity are indifferent. Virtue or morality consists in this conformity; right conduct is not commanded because it is good, it is good because it is commanded. The commandments are made known to a chosen one, an actual or legendary lawgiver—Numa, Moses, Lycurgus, Buddha, Zoroaster, Jesus—who becomes the great hero of the community acknowledging his law. Through him the Lord reveals His will regarding men. The awareness of this law, whether it be unwritten *mos majorum* or written codes as with the Parsis, the Spartans, the Jews, the Christians or the Buddhists becomes the determining component of conscience. The "voice" or the "dictates" of conscience consist in the conflict between the pull or push of a prescription or a tabu and some contrary impulse.

The code is transmitted chiefly by means of

education. Among primitive peoples this is mainly a brief painful indoctrination in the tribal law. More advanced societies also presume that the code must be learned. In none do its obligations bind the admittedly uninstructed. Thus children, at least among savages, are left pretty much alone until their initiation at puberty. Then the code becomes coercive. Moreover, within the general tribal code special sex codes function, so that males and females live under different rules.

The history of morals reveals, however, much variation. Among Christians, especially after the Protestant Reformation, children were indoctrinated at a very early age and the code bound them only a little more strictly after baptism or confirmation than before. The Athenian rule for women contrasted sharply with the Spartan; republican Rome made other requirements than did the Rome of imperial times.

In all societies birth, wealth and position modify the obligatoriness of the code. Thieves have their honor; and presumably *noblesse* obliges only the nobility. Actually, however, *noblesse* carried privileges, not obligations. Thus, while gambling debts were considered "debts of honor" which must be paid, payment for necessities could be deferred with impunity until death; the nobleman hunted, the commoner poached; the nobleman "drank like a gentleman," the commoner "got drunk." Pecuniary times have invented and the moral rule enforces the standards which make debt and gambling alike dishonorable.

Sexual morality provides similar distinctions. The code for females is stricter than the code for males. The woman known to live like a man is *déclassé*; while a man who consorts with prostitutes is accepted everywhere.

Race is a factor. American whites do not expect Negroes to live by their rules of sex or property. White men may consort with Negro females all their lives; a Negro male cohabiting with a white female may be either burned to death to vindicate "the honor of Southern womanhood" or judicially executed with all the pomp and circumstance of legal ritual.

Sometimes religion does not strengthen but relaxes a community's code, as among the Brahmins, where the *ngana yogin* claims freedom from all the rules of caste. Class, profession or vocation relaxes codes. Thus the conduct of artists is allowed a certain looseness and flexibility; and women artists, especially actresses, are conventional objects of pursuit by libidinous

males who can afford to practise the art of love for its own sake. Again "business is business" and has its own morals, which the schools endeavor to offset with "business ethics."

In fact the rule of any code whatever is at no time complete or unchallenged. Variations are sometimes allowed, sometimes assert themselves, sometimes operate in secret but always exist. They are unstable and shifting configurations of many groups, each with its characteristic behavior pattern, which sometimes nullifies and always diverges from the code of the dominant group.

The latter, enforced against continual opposition and variation, is the special charge of the ruling class. The code indeed serves as its major implement of domination among the Austrians, where the magisterial old men do what they please while others are punished for breaking the rule. In the nature of things it rarely happens that the guardians of any law do not soon feel themselves somehow above the law. This is why corruption comes to be the traditional attribute of the military, the politicians, the police and the clergy. To every wielder of "lawful" power accrues that "divinity" which "doth hedge a king," which raises him above the law. Since a way of life can be actual only as the habits of the people whose way it is, the preoccupation of those who enforce a way must necessarily center in the habits of enforcement. Codes seem powerful only with the strength of those habits of enforcement and operative only by their action. The enforcers of a code soon acquire a realistic attitude toward the nature, origins and functions of codes. They do not obey what they enforce. Was not the secular spirit first manifest among ecclesiastics themselves?

But whatever the ruling class, the moral code is enforced and invoked in its behalf. Invocation usually becomes prominent when opposing groups with power challenge the dominant mores and the ruling class feels insecure. At such times monitions are heard about the decay of morality and the decadence of civilization.

Opposition usually begins as protest and grows into power. It defines and confirms itself by a contrasting doctrine and discipline of life. Historically all oppositions start with a morality which seems ascetic beside the established ways. Philosophic sects like the Epicureans and stoics, theocratic ones like the Jewish Pharisees, the first Christians in Palestine and elsewhere, oppose a certain strictness of conscience and conduct to the general compromise and tolerance

of the ruling classes of the time. Primitive Christianity was communistic and monastic; Lollards, Cathari, Calvinists, enacted analogous simplifications and prohibitions. The contemporary parallel is the Communists of Russia with their hard discipline, egalitarian poverty and religious adherence to the Communist code. These endure so long as the new code is not secure. The history of every endeavor to set up new morals shows that relaxation follows security. Among the keepers of the code *askesis* expands into a hedonic practise, but upon their subjects it is imposed as heretofore. So in the United States "Americanization" uses the "doctrine of the Declaration of Independence" to impose upon its initiates acquiescence in the supremacy of the ruling classes and their ways. The Russians' "dictatorship of the proletariat" and "proletarianization" are simply candid and unhypocritical applications of the same practise in the Russian scene.

Every moral code depends upon coercion, often unconsciously. On infants and children coercion works by emotional and verbal contamination from adults, who impart their wishes in a moralizing setting of rules variously rationalized. The emotions soon become so overlaid with habitual rules that the rules themselves seem intuitive and inevitable, when they are only familiar. Where this has ceased to be the case, as in the modern world, or in Periclean Athens, the codes have either been confronted by alternatives or shaken in authority through catastrophe or experience. Thereupon they receive protective elaboration and are reenforced with secondary agencies created *ad hoc*. Such elaborations and agencies are the courses in "character building" now in vogue in American schools, the rise of the discipline called "social ethics" and the curious "citizenship" courses. Others are the extragovernmental censors: "patriotic" societies, the Ku Klux Klans, and the new creations of the churches. All endeavor to validate codes recognized though not admitted to be shaky.

But the most pervasive sanction for any complex of morals, whether or not codified, is religion. Religion is nearer the primary pattern of the social complex than any other institution. Its sanctions, involving supernatural rewards and punishments, enter early into the consciousness of the young. In the child's experience the God invoked to enforce right conduct consists of the word "God" and the feeling and attitude of the person speaking. For the most part God,

in early life, had been the verbal associate of actually experienced monition, anxiety, repression, hurt or pain. By its use the code is readily made momentous. Orthodox cults thus continue to invest with moral sanctions much that the secular world has reduced to manners. Female fashions, drinking, dancing, gambling, diet, are frequent topics of warning for professional guardsmen of the code. The same practise keeps atheism reprehensible and obscene and sustains the widespread delusion that disbelieving in God and possessing a criminal disposition are synonymous, that without religious sanctions morals must decay.

Enforcement and support of the sanctions of morals call for all the engines of control employed by any power desiring to maintain doctrines favorable to itself. The lapse of such doctrines follows either the rise of more powerful countersanctions or new conditions of existence which alter morals and ultimately create new rationalizations. Thus the mediaevals regarded usury as a more or less immoral practise fit only for Jews and infidels. But when an improvement in mining increased the production of precious metals, the money economy which it made possible moralized usury. Luther allowed, and Calvin, Puritanism's prime lawgiver, wrote a treatise favoring, usury. Here that complex of practises usually described as the morals of early capitalism employed Reformation theology to rationalize and to justify behavior contrary to the traditional code, which was soon made to conform to the strength that its supporters could not overthrow. Practise came first; its conscious formulation as a permitted, even a noble, action followed. The new code was at once the expression of the power and a defiance of the enemies of those who practised it.

Labor saving machinery disturbed the habit patterns of the community in another way. As machinery spread, population took an unprecedented spurt; and a worker counted inversely to the number of his competitors. This led to "labor troubles." These Wesley tried to assuage by a "method" revitalizing the old code of submission and obedience to authority. But he could do so only by altering fundamentally the structure of the ecclesiastical establishment itself, allowing to laymen forbidden ecclesiastical privileges and powers, thus distracting the attention of early British industrial workers from their hard lot. The cause of the evil, however, nullified the cure, and the Methodists are a negligible sect in England. In the setting of the American wil-

derness, however, Methodism served to preserve the traditional code, combining considerable liberty with authority, and Methodists are important in the United States.

Since Wesley inventions have multiplied geometrically, and contacts of diverse moralities in proportion. Every new major invention adds to the environment a new control of behavior, distorting, overlaying and otherwise transforming habits. Every new contact invites the odious comparison. Morals appear so varied and contrary that students freed from the traditional prejudices see morals as habit structures whose value for living is, to say the least, ambiguous. Since these structures frequently interfere with rather than facilitate function morals are seen as growths, like languages; the patterns of neither have any necessary connections with the meanings they communicate. Functional obstruction is attributed particularly to morals of sex and property, and the tendency of theorists is to strip entirely away their mass of secondary and tertiary habit growths. The tendency serves to verbalize the actual attrition and replacement of morals which industry and science are causing. Thus, the sex standards of "purity" and "virginity" for women are lapsing; "marriage" has ceased to be the finality it was. Legal changes are registering the trend toward the equalization of the sexes. The old code degrading women is invoked less and less.

Property habits evince analogous changes. Here the content and character of ownership are so radically altered by the financial and industrial system that the public limitation upon "property rights" grows by leaps and bounds. This applies also to the rights of parents over children. The "sanctity of the family" is cried up the more as the community increasingly takes on parental obligations.

Earthquakes, floods, epidemics, famines, depressions, wars and revolutions relax morals generally and thus set up counter-affirmations of the code. The helpless counter to revolution is canonization of the overthrown code: Russian émigrés are said to observe as a ritual the czarist ways of life, economically futile and no longer valuable as conspicuous consumption. Makers of basic revolutions, such as the Russian or French, may endeavor to ordain a new code. Such a code conflicts directly with both the mores of the residual population and the personal habits of its individual members. The effort to impose it leads simply to withdrawal, psychological and physical. Neither appeals to

the hope of security and the fear of starvation nor to experimental demonstration accomplish much. The emotions mostly energize the old habits; St. Tryphon remains the insecticide preferred over more material poisons. Persistent training and indoctrination only ruffle the surface. While no emergency disrupts the basic life patterns, while primary needs are gratifiable at the level of subsistence, adult morals hardly change. Ten years of Russian effort to establish "scientific, rationalistic morality" leaves the older patterns and sanctions very little altered and has set up new ones equally irrational. Only fundamental innovations in the material environment, new people, new tools and new stuffs generate new habits. Lacking these, even habits shattered by catastrophe come back. At most the innovative codes serve the secure as escapes or entertainment. Both Rousseauism and science so served the eighteenth century aristocrats. By itself alone a new code changes manners, not morals. It sets up a fashion, not a folkway.

Ethics, i.e. philosophies or psychologies of conduct, also define themselves with reference to the situation in which they arise. As produced, a system of ethics utters the temperament of its inventor, expressing his personal reaction to his world. This he makes public. If it becomes vogue it does so for two reasons. The first is the congruity of the author's personal hopes and resentments with the mood of his time. The second is the persuasive skill with which he rationalizes the mood, endowing its loves and hates with an ineffable ground in the nature of things. So Oswald Spengler lays out the cosmic ground for German discontents. So Sigmund Freud rationalizes the changing sex relations due to science and industry. So Karl Marx grounds in an invincible dialectic necessity the aspiration of the disinherited of industrial societies for the fulness of life. So Henri Bergson mollifies the fear of science and discontent with industry which are evinced by partisans of lapsing morals and their sanctions. The systems consist of logical elaborations of special items selected from the aggregate of morals. This aggregate has no unity and no structure. It is a jungle of secondary and tertiary growths of habits, most of which an engineering comprehension of the dynamics of human and cultural survival would strip away and all of which it would rearrange.

Unhappily moralists are persons who take an engineering view of other men's ways of life. To a man his ways are his life: he clings to and

endeavors to preserve them regardless of the cost. A "scientific, rationalistic morality" is thus a contradiction in terms. Morals in their roots, their growth and their sanctions are as irrational as the lives they inform; they are to be rationalized but hardly rendered reasonable.

HORACE M. KALLEN

See: ETHICS; CUSTOM; FOLKWAYS; CONVENTIONS, SOCIAL; ETIQUETTE; LAW; CONDUCT; CONTROL, SOCIAL; TABU; SANCTION; COERCION; CONFORMITY; PUBLIC OPINION; RELIGION; EDUCATION; HONOR; CHANGE, SOCIAL; EVOLUTION, SOCIAL; INNOVATION; CONSERVATISM.

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MORATORIUM. The desire to protect individuals or communities from the consequences of default or of the collapse of the general credit structure has resulted in the invention of various

domestic market. Moreover, since the domestic producer could sell his product to whomsoever he pleased, it placed within the power of the German producer the right to decide which foreign countries would be permitted to export pictures into the German market. The introduction of sound in 1928 further modified the situation. The German public wants to see sound pictures and it wants pictures with understandable dialogue. The result of the two combined forces naturally is reflected in an increase in the number of producing companies in Germany and a decreased importation from the United States. On the other hand, the experience of Germany with the *Kontingent* can scarcely be said to be satisfactory. Exhibitors have found difficulty in getting a sufficient number of pictures to meet their requirements. German producers have not been able to create pictures equivalent in quality to those which could be obtained elsewhere, and the public in some instances has reacted against them. Some modifications have been made in the law since 1928, but the situation continues substantially as described.

The original French film decree of February 19, 1928, authorized the release of foreign films on the basis of import permits. A control commission fixed the number of permits, which were issued in a definite ratio to domestic films shown. The French export situation resulted in a long series of negotiations between American and French interests, which finally culminated in a tentative agreement. The English law, instead of being concerned directly with the number of foreign films which may be imported, requires that the English exhibitors reserve a certain portion of their screen time for British pictures. Under the Cinematograph Films Act, which became effective on January 1, 1928, the restriction quotas were set for a ten-year period. The Austrian and Italian laws are based on regulations similar to those which prevail in Germany and France. Closely related to the problem of film importation is that of an extremely complicated international patent situation, all the more involved because of the underlying political considerations.

HOWARD T. LEWIS

SOCIAL IMPLICATIONS. The general character of motion pictures under private ownership and development is determined almost entirely by the economic nature of the product. Photographic film admits of mechanical duplication

and is clearly subject to the "law of increasing returns." It reflects therefore the effort of its financial backers at mass appeal and has been confirmed in this tendency by the methods of wholesale distribution and exhibition adopted in the United States, and to some extent in Great Britain and Germany. The economic motivation is conspicuous in the history of the American motion picture, which was developed almost entirely by persons of humble origin, mostly Jewish, who entered the "show business" in the days of the penny arcade with little capital but a keen instinct for the exploitation of popular appetites. Some of them have subsequently acquired a certain degree of education, of aesthetic appreciation and ambition; to others technical and financial advance has given an opportunity to exhibit the same motivation on a wider, but hardly a higher, plane.

With the constant increase in the size of the market the industry traveled the familiar road which led through expanding output to large scale production. Investment and working capital were multiplied with unprecedented prodigality, while production costs rose on a wave of reckless extravagance. Whereas in 1913-14 D. W. Griffith's spectacular and very profitable film *The Birth of a Nation* cost about \$100,000, costs of \$1,000,000 were frequent twelve years later. Cecil de Mille spent \$2,300,000 on *The King of Kings*, and the Metro-Goldwyn-Mayer concern put up \$4,000,000 for a half interest in *Ben Hur*. Salaries of leading players were advanced to fantastic levels reflecting their real or imputed drawing power. Such expenditures naturally entailed an increased dependence on the size of the market. As in other such cases the eventual results were the elimination of the small producers and a bitter struggle to control the market, culminating in a very expensive policy of theater proprietorship on the part of the leading firms and their associates.

In order to maintain the rapid changes of program which competitive conditions appeared to demand, the number of films produced also increased greatly, reaching a total of six to eight hundred annually in 1929-31. Under no circumstances could more than a small proportion of such an output be interesting. But in this way the maintenance of the widest mass appeal became a matter of financial life or death to the industry; and the cultural aspects of the American film were thus almost exclusively determined. The circumstances were distinctly adverse to artistic or thematic experiment. A

selective appeal was precluded by the scale of production and distribution. Exhibitors developed a horror of the "highbrow" picture and emphasized the financial failure of films which demanded more than the most rudimentary intelligence on the part of the spectator. While artistic or thematic significance was not entirely precluded by this attitude, it was made conditional on the maintenance of mass appeal—a somewhat difficult condition for such significance to fulfil. So long as the industry is equipped and financed on the assumption that 90 percent of the "product" must appeal to every possible type of audience—to the "hick towns" of the middle west as well as to the playgoers of New York and Philadelphia—no rapid intellectual or artistic progress need be expected.

Further it must be noted that the arts of music, drama, opera and the ballet owe much of their cultural advance to disinterested patronage of various kinds, under which selected audiences have encouraged and eventually popularized artistic innovations. The economic circumstances of the motion picture, especially since the introduction of the sound film, have rendered this difficult, except in Russia. The manager of a motion picture theater is not, as is the manager of a stage theater or a concert hall, an artistic entrepreneur; he is merely the retailer of a "product" manufactured for mass entertainment. There have been in the United States as in Europe a few independent producers of experimental or purely "art" film; but there are no regular channels through which their efforts can be made available to the public. In London the Film Society—a subscription and non-commercial enterprise—has acted for several years as a medium for introducing to the intelligentsia foreign and domestic pictures of minority interest; and its organization has been duplicated in Oxford, Cambridge and a number of provincial cities. In the United States there has been no centralized means of distribution or exhibition of exceptional pictures. There were, until the coming of sound, perhaps two or three dozen small exhibitors maintaining a somewhat precarious existence for special types of audience. The distribution system of the Hollywood concerns denied them a selection of the more popular screen material; the introduction of sound presented them with a financial problem to which their resources were in many cases unequal; and the trade depression still further thinned their ranks. Unaffected by their influ-

ence, the commercial film has therefore followed rather than led the herd mentality. It has embodied not simply the crowd instincts and stereotypes of mass psychology but the interpretation of these as viewed exclusively from the profits angle by the salesmen's and exhibitors' conferences, which have the ultimate control of production policy.

While therefore the technical development of the American motion picture has reached a very high level, its artistry and ideology have remained extremely conservative. This conservatism, dictated by the financial assumption of mass appeal, has been reenforced by the industry's fear of offending any influential group in the community. The organization of Motion Picture Producers and Exhibitors of America, Inc., by Will H. Hays, early in 1922, arose out of the industry's apprehension of adverse political action following a succession of unsavory events involving film personages. The Hays office adopted from the start a policy of cooperating with critically minded groups under the slogan "Selection not censorship." It arranges for the previewing of films by representatives of women's clubs and religious organizations and assists in giving publicity to their endorsements of inoffensive pictures. These and similar societies have in many cases organized locally to exert what influence they can on the exhibitors in favor of "endorsed" films. The point of view of such groups is mainly moralistic, expressing the mores of the consciously conservative elements in society. The production code of the industry, drawn up and enforced through the medium of the Hays office, is similarly conservative in effect, consisting of negative maxims expressly designed to avoid conflict with the ethical, political, racial or religious attitudes of the mass of the people. The result is that in comparison to the freedom with which social or individual issues are handled in literature and drama the motion picture scarcely figures as a factor in ideological advance. Such current issues as appear on the screen are selected rather for their "publicity value" than for their intrinsic significance, and those on which public opinion is strongly divided are either avoided or handled in a manner which evades their more controversial aspects.

The National Board of Review, originally organized in New York in 1909, gives considerable attention to other than the merely moralistic aspects of the pictures it reports on. The board works through "better films committees" in the

localities, of which the membership, like its own, is individual rather than representative of organizations. Like the other groups it is dependent on the industry itself for its previewing and some other facilities; but otherwise its connection is much less close. It is one of the few previewing organizations which keep systematically in touch with the newer developments in art and technique. From this point of view the average list of "approved," or "endorsed," films is not encouraging. Inasmuch, however, as all such effort comes into effect only through local groups of "publicly minded" (and often self-appointed) citizens, the moralistic approach on the whole prevails. It is difficult for a heterogeneous and usually untrained group of people to agree on an interpretation of the term "better" without falling back on the popular mores.

The social significance of the film remains as it was described by Milton Sills, a popular movie star of the early 1920's, in a lecture at the Harvard Business School in 1927: "Just how does this form of amusement function as compensation to the drudging millions? By providing a means of escape from the intolerable pressure and incidence of reality. The motion picture enables the spectators to live vicariously the more brilliant, interesting, adventurous, romantic, successful, or comic lives of the shadow figures before them on the screen. . . . The film offers them a Freudian journey into made-to-order reverie, reverie by experts. Now reverie may be unwholesome—our psychological studies are still too immature to decide this question—but in our present form of culture it seems to be necessary. In any case, reverie engendered by motion pictures is certainly more wholesome than that engendered by the corner saloon or the drab walls of a tenement house. For an hour or two the spectator identifies himself with the hero or heroine; potential adventurer at heart, he becomes for the moment an actual imaginative adventurer in a splendid world where things seem to go right." A further comment on film ideology, still largely true, was supplied in the same course of lectures by Cecil de Mille: "When a star reaches the point where the sales department can 'sell' him or her, then he or she gets most of the weak stories. The good stories will sell themselves, and the star doesn't need a good story."

The development of more intelligent film criticism in the press and the success of the large number of adaptations from the stage have done much in recent years to improve the quality of

both acting and scenarios. On the other hand, the block booking system, whatever its financial pros and cons, is probably a retarding influence on film quality since it acts as a strong buffer between critical opinion and sales. A further retarding influence has been the monopolization of the domestic commercial screen by pictures produced in the United States. Several of the foreign producing concerns maintain distribution centers in this country, but the exhibition of their product is practically confined to the very small number of independent concerns catering to special publics. On the other hand, American film is largely shown everywhere except in Soviet Russia and in Italy, although its sharpest critics are found in foreign lands. There have been vigorous efforts on the part of other countries to restrict the proportion of American film or to increase that of domestic by the quota system; and the economic as well as the cultural results of film export cannot as yet be said to have contributed much to international amity. The cinema committee of the League of Nations is endeavoring to secure international free trade in educational and cultural films; but the technical and other difficulties of the attempt are evident and serious.

Both in the Soviet Union and in Italy the governments, either directly or by subsidy, have actively promoted the production and exhibition of films designed to strengthen national self-consciousness and to guide it in a desired direction. In the former production policy as well as the training of cinema artists and technicians is under the direct charge of the federal and constituent states. In the latter the state supports and controls L'Unione Cinematographica Educativa (LUCE), which in addition to producing films of approved quality, distributes independent commercial product as well; Italian exhibitors are compelled to include cultural, educational or propaganda films in their programs. In Germany the Lampe Institut, staffed and partly supported by the state, supervises, encourages and correlates the production and distribution of artistic, educational and interest films; their exhibition in commercial theaters is further encouraged by the remission of entertainment taxes. The Japanese government as well as certain semipublic bodies in Japan undertakes the production of cultural and educational films and has greatly facilitated their exhibition in the schools. The French government has limited its direct activities mainly to the classification of films and the collection, for loan purposes, of

educational ones. In this latter connection the state meets part of the cost of projector installations in the schools. The most important step recently taken in England is the endorsement by the government, and its financial support, of a projected film university, which will not only act as a center of collection and distribution of non-commercial film but will engage in all phases of education related to or suitable for treatment by the cinema. By comparison with the foregoing, the attitude of public authority in the United States reflects the same general policy of leaving cultural values to look after themselves as is seen in the broadcasting business, although certain government departments, museums of art and universities have made non-commercial film collections available for educational showing. The "news reel" films generally shown in commercial theaters may perhaps be credited with some educational value; but they suffer from the same conservative influences as above described and have lost a good deal of their authenticity by their increasing devotion to subjects specially posed for the camera.

There has been for many years a voluminous controversy waged on an international scale as to the effect of the cinema upon children and adolescents. In England and America there are movements, mostly voluntary, to discourage or prohibit attendance of children at films classified only for adult showing and to encourage special showings of films for children; but a recent and most authoritative British report (*The Film in National Life*, 1932) urges that the line of advance is to improve the general quality of the films rather than to encourage the further segregation of the child from the adult by restrictive action. The same report endorses a statement of the British home secretary in Parliament to the effect that "on the whole the cinema conduces more to the prevention of crime than to its commission." In general the conclusion is that restrictive or censorial activities are less important than constructive policies devoted to the dissemination and preservation of cultural values. In education, while the informative possibilities of the film are obvious, there is the handicap that it tends to encourage too passive an attitude on the part of the pupil. Recent investigations show that certain types of mind respond more readily to visual than to oral presentation; but the best current opinion emphasizes more and more the need of carefully planned integration and active response, if film presentation of subject matter is to be genuinely

educational. In this respect much existing film of the merely informative type is unsuited to modern teaching technique. Mention must be made, however, of the jointly educational and commercial success of the British Instructional Films and some of the German Ufa and Russian Sovkino productions, which combine exceptional cinematic merit with valuable content.

It is an open question whether an art which relies almost exclusively on mass appeal can adequately preserve or foster the higher cultural values. Great art and mass appeal are not inconsistent, but their coincidence in any medium is too rare to constitute the sole assurance of cultural progress. It has been suggested that the world wide dissemination of American film will at least encourage the spread of the English language as well as of American trade. To some extent this is true; but there are strongly nationalistic tendencies in the films of all nations, particularly of those subject to severe American competition, and in view of the ease with which the film lends itself to propaganda its influence in a world of increasing international tension must remain debatable.

WILLIAM A. ORTON

See: AMUSEMENTS, PUBLIC; ART; EDUCATION; PROPAGANDA; PUBLICITY; CENSORSHIP; COMBINATIONS, INDUSTRIAL; PATENTS; THEATER.

Consult: FOR INDUSTRIAL DEVELOPMENT: Lewis, H. T., *The Motion Picture Industry* (New York 1933); *Cases on the Motion Picture Industry*, ed. by H. T. Lewis, Harvard Business Reports, vol. viii (New York 1930); Ramsay, T., *A Million and One Nights*, 2 vols. (New York 1926); Franklin, H. B., *Motion Picture Theater Management* (New York 1927), and *Sound Motion Pictures* (New York 1929); Messel, R. P., *This Film Business* (London 1928); Seabury, W. M., *The Public and the Motion Picture Industry* (New York 1926); *The Story of the Films as Told by Leaders of the Industry to Students of the Graduate School of Business Administration, Harvard University*, ed. by J. P. Kennedy (Chicago 1927); "The Motion Picture in Its Economic and Social Aspects" in American Academy of Political and Social Science, *Annals*, vol. cxxviii (1926); Fawcett, L'Estrange, *Films: Facts and Forecasts* (London 1927); United States, Congress, Senate, Committee on Interstate Commerce, *Motion Picture Films, Hearings*, 70th Cong., 1st sess. (1928); Federal Trade Commission, *Decisions*, vol. xi (1930) 187-213; Poor's Analytical Services, *The Motion Picture Industry* (New York 1932); Poor's Analytical Services, *Analysis of Warner Bros. Pictures, Inc.* (New York 1932); Radovkin, V. I., *On Film Technique* (London 1929); *The Film Daily, Year Book of Motion Pictures*, published in New York since 1918.

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(16th ed. Berlin 1922); Oppeln-Bronikowski, F. von, *Reichswirtschaftsrat und berufsständischer Gedanke* (Berlin 1920); Curtius, J., *Bismarcks Plan eines deutschen Volkswirtschaftsrats* (Heidelberg 1919); Hauschild, C. D. H., *Der vorläufige Reichswirtschaftsrat 1920-1926* (2nd ed. Berlin 1926); Prélôt, Marcel, *La représentation professionnelle dans l'Allemagne contemporaine* (Paris 1924); Finer, Herman, *Representative Government and a Parliament of Industry, or a Study of the German Federal Economic Council* (London 1923); Mitwally, A. H., *La démocratie et la représentation des intérêts en France* (Paris 1931); Cazalis, Émile, *Syndicalisme ouvrier et évolution sociale* (Paris 1925); Lorwin, Lewis L., *Advisory Economic Councils* (Washington 1931); Glum, Friedrich, "Der deutsche und der französische Reichswirtschaftsrat" in *Institut für ausländisches öffentliches Recht und Völkerrecht, Beiträge*, vol. xii (Berlin 1929); Picard, Roger, "The German and French National Economic Councils" in *International Labour Review*, vol. xi (1925) 803-29; Dendias, Michael, *Le problème de la chambre haute et la représentation des intérêts à propos de l'organisation du sénat grec* (Paris 1929); Ambrosini, Gaspere, *Il Consiglio Nazionale delle Corporazioni*, Istituto Nazionale Fascista di Cultura, Quaderni, 2nd ser., no. ix (Rome 1930); Herring, E. Pendleton, "The Czechoslovak Advisory Board for Economic Questions" in *American Political Science Review*, vol. xxiv (1930) 439-50; Hobson, S. G., *The House of Industry* (London 1931); Webb, Sidney and Beatrice, *A Constitution for the Socialist Commonwealth of Great Britain* (London 1920); United States, Congress, Senate, Committee on Manufactures, *Hearings: a Bill to Establish a National Economic Council*, 72nd Cong., 1st sess., 2 pts. (1931); *America Faces the Future*, ed. by Charles A. Beard (Boston 1932).

NATIONAL ECONOMIC PLANNING is a somewhat more vague concept than the corresponding German *Planwirtschaft* (planned economy). Although both imply the incorporation of planning institutions into the economic system, the former does not involve any definite assumptions as to how far the state itself is to become the organ of administration—whether it should set up agencies for the direction of the economic system or merely introduce more or less far reaching measures for the planned organization of economic life upon a national basis. National economic planning, as used by different writers, may mean anything from the introduction of partial planning measures to the complete transformation of the entire economic system upon a socialistic basis. *Planwirtschaft*, on the other hand, involves the idea of control of the economic system in its entirety, and controversy hinges only upon how this assumption of control by the state can best be realized. Such difference of agreement as to method accounts, however, for the variation in schemes for economic planning even among socialist theorists.

All ideas of planned economy have one fundamental assumption in common—that under a capitalist system periods of prosperity are inevitably followed by serious crises, which tend to become increasingly severe. In succeeding crises the self-generating recuperative powers of capitalism are more completely paralyzed by the very acuteness of the crisis and by the growing inflexibility of prices. The idle worker is left face to face with idle machines and production is suspended, while the profit motive ceases to operate. In a planned economic system, however, production would be carried on to meet the needs of the inhabitants without any regard for profit. Thus, basic to all ideas of planned economy is the notion of a better system under which crises may quickly be overcome or prevented altogether.

Critics of the capitalist system seldom go so far as to deny that if the laws of the price process were given free rein capitalism too would reveal the workings of an unconscious plan. They point, however, to the fact that under capitalism the very development of the forces of production, which is its historic mission, leads to ever greater concentration of production and to monopoly. Every monopoly seeks increased profits through control of the market; this is possible only at the expense of the profits of those industries which still operate on a competitive basis. Monopoly profits, being utilized for the further expansion of production, bring about the disproportionalities which are among the most important causes of business crises. Monopolistic enterprise further seeks to keep up prices during a period of depression and consequently tends to aggravate it. Thus monopolies with their partial planning and organization prevent the realization of that unconscious balance which is theoretically possible under a system of free competition. There is moreover a wide difference of opinion as to whether a free competitive system, even if it could be maintained, would guarantee the maximum or the best possible production.

Economic difficulties since the end of the World War and the persistent spread of unemployment since 1929 as well as the intensification of the crisis by the interplay of political conflicts have so strengthened criticism and confirmed doubts as to the adequacy of the capitalist system that the idea of a planned economy has appeared among many different groups in almost every country. Much of this speculation has come from circles which did not entertain

any notions of opposition to the capitalist system until the hopelessness of general economic conditions revealed hitherto unperceived characteristics of capitalist economy. There is, however, nothing novel in the idea of a planned economy except the term itself and the concrete projects for its realization. Every socialistic system worthy of the name embraces such a notion. Every variety of socialism desires to eliminate economic exploitation of one individual by another, to make society master of the economic process and to provide for an equitable distribution of the most abundant production possible. This goal, however, implies the regulation of the flow of goods in accord with the needs of the masses, the imposition of control over the anarchy and inequity of capitalist production.

The proposed schemes for economic planning manifest the greatest variety. Any strict interpretation of the concept requires the exclusion of all measures and projects which seek to regulate only one part of the economic system. Such partial schemes of organization aim most often at the stabilization of the competitive, market system (*see* STABILIZATION, ECONOMIC) but fail to achieve this object simply because they have no total plan in view. On the other hand, attempts at the stabilization of production, and particularly of profits, in one industry alone serve to sharpen the conflicts and crises of the competitive system. A complete scheme of organization can never be achieved through the piecemeal regulation of individual parts of the economic structure. Only in one of two ways can such change be brought about: first, by the assumption of the control and the regulation of the basic industries which by their size and state of development are most essential to the economic system, in accordance with a general plan of production; or, second, by the control of the money and credit system, the institutions which regulate the distribution and the pressure of economic forces. In a highly developed capitalist system, however, reliance solely on this latter method would be incompatible with the desire to encompass and link up all phases of economic life. Probably the most fundamental distinction to be made in any attempted classification of proposed schemes for planning is that between capitalistic and socialistic plans—control within the bounds of the capitalist system as opposed to the substitution of a new form of economy. Some plans which may be classed as of the capitalistic type are based on a desire for increased business control, others on attempts at

the multiplication of progressive social agencies. Socialistic plans differ most sharply as to the desirability of continuation of the market price system within the scheme of planning (*Marktsozialismus*) as opposed to a complete administrative control of all economic processes (*Verwaltungssozialismus*). There are many planning schemes which defy any definite classification, and there are furthermore disagreements as to the best method of achieving particular systems of planning.

Some contemporary criticism of capitalism goes so far as to call for the abolition of all its characteristic institutions, including money. The demand for a moneyless economy is based on the belief that the money system is responsible for the exploitation of the needy and on certain confused ideas as to the existence of a money monopoly. Such critics contrast with this situation the methods and aims of technicians and organizers, who see in the economic system only a series of concrete fields of production, and then strive to construct a modern industrial order along purely technical lines. Unfortunately this view fails to take into account the social structure embedded in every economic system. A society thus ordered along purely technical lines would involve a form of complete administrative control, such that production as well as distribution *in natura* would be determined in advance—a kind of welfare economy (*Fürsorgewirtschaft*), which, since it would take all freedom from the consumer, could hardly be introduced either in western Europe or in America. Moreover such a scheme for a purely natural economy rests on the false assumption that money or some equivalent standard of value can be dispensed with. Its advocates fail to see that no economic order is possible without the homogeneous reduction of all the elements of production to one common denominator. So long as it is impossible physically to add cows and spindles, a purely technical construction of the economic system is out of the question. Such technical elaborations of the possibilities of production are nevertheless not without value, for they reveal what astonishing results can be expected, under favorable conditions, from a proper direction of the forces of production.

A number of contemporary economists have questioned the possibility of a socialistic economic system operating with money as the standard of measurement. The most frequent argument, first propounded by Max Weber and further elaborated by Mises, is that within a

socialist economy there is no provision for market control of the process of price formation and therefore no possibility of accurate evaluation of the forces of production. Particularly is it impossible to determine accurately the price of the means of production, since this can be worked out only in the market, whereas under a planned economy with no private ownership of capital there is no real market for the means of production. It is further argued that without price and profit as regulators of production the economic system would soon lose its direction, although it might continue to function for a time on the basis of previous production records. But disorder, disproportion of all sorts and finally the breakdown of all production would inevitably result. It is even contended that in such an economic system it would be impossible to achieve a sufficient correspondence between costs and returns from production, since the value of the means of production could not be established, and therefore consumption would have to be regulated dictatorially. Moreover, it is argued that within such a system the dynamic forces for the extension of production would soon be exhausted and the maintenance or increase of capital would become impossible.

This argument clearly envisages as the only form of planned economy a system under complete administrative control. But even such an economy would naturally have to apply internally the same criteria of measurement as those used by industry under the capitalist system, and standards which proved false would have to be corrected in the same way under a planned economy as under a capitalist economy. Finally, it is unreasonable to assume that in a socially planned economic system the important processes of capital depreciation and accumulation would remain hidden. For a socially directed economic system would have at its disposal almost complete statistical information concerning the forces of production and their capacity and would be able to gauge any retardation of productive capacity. Indeed it may be noted that even in the realm of theory it was the direction of attention to the economic system and the economic process as a whole—first stressed by Marx—which revealed the intimate relationship between the accumulation of capital and the development of productive forces.

The argument, advanced chiefly by Mises, that under a system of planned economy it would be impossible to determine the value of the means of production proceeds on the as-

sumption that concentrated planned production in a given industry can determine its costs and demand the corresponding price in the market, that each branch of production can do likewise, but that there is no possible way of measuring how rationally and usefully this capital and labor have been applied or whether a different distribution of capital and labor would not have been more advantageous. According to this view bad management could not be recognized. In opposition it may be pointed out that in no industry need production be so centralized as to preclude comparisons with regard to productive efficiency within the industry itself. Moreover, as has been noted by Marschak, Mises' argument is more applicable to monopoly than to planned economy; for in fact capitalistic production proceeds without much hindrance even when capital and labor are misused, since control of the market makes possible the raising of prices to cover costs and the exclusion of more efficient producers.

The evolution of the Soviet Five-Year Plan has demonstrated that it is possible to carry through the calculation of production without excluding the operation of the consumer's free choice. The supply of means of production also is regulated by present and expected consumption needs. In practise the chief problem involved in a system of economic planning is not that of calculation of demand but rather that of labor discipline and the relative evaluation of different kinds of labor. In this connection social concepts and their transformation under the stress of changing conditions play an important role. In the Soviet system, however, as in any economy, it is the distribution of income which determines the direction of production. Accumulation is specifically provided for either through additional increments in the prices of goods, through enforced savings or through taxation and presents no difficulty where energetic political means are resorted to for the compulsory creation of capital.

Special attention has been devoted by a number of economists to the possibility of a planned economy within a capitalist system. If the term planned economy is used strictly as referring to the centralized direction and administration of the entire economic system, it is in direct opposition to a system of production based on private enterprise. Completely free enterprise, however, has never existed. Every national economic policy affects in some way the entire economic system, whether it be the mid-

dle class policy of retarding the dynamics of the capitalist system, the social policy of limiting the free operation of economic forces wherever they lead to the misery of the working classes or the positive industrial policy of furthering the acceleration of industrial development through technical education or the imposition of tariffs. Nevertheless, previous economic policy within the capitalist system has never set itself the task of fashioning or directing the entire system.

The World War made necessary the most thoroughgoing centralized direction of economic organization which has ever prevailed under the capitalist system. In every belligerent country some scheme of central control was instituted, and it is doubtful whether the economic system in any of these nations could otherwise have supplied the necessary war output. The war controls were, however, designed rather for the protection of the capitalist system than as a step toward socialism. Indeed without some system of rationing the poorer classes in many countries might have been subjected to such widespread deprivation that revolution would have resulted. The problem of wartime organization was relatively simple; with few exceptions the aim was endorsed by the entire population. The dictatorial powers of the leaders, even over economic activities, were never questioned in most of the allied countries, and even in Germany they aroused no opposition among the masses until the last phase of the war. Such economic control was intended moreover only as a temporary device, although in Germany many of the measures were retained long after the conclusion of the war. It is true that in many of the belligerent countries the war organization closely approximated a planned economy. In Germany, for instance, the Reichs-Kohlenkommissar, by virtue of his control over the amount of coal to be supplied to each industry, to agriculture and to private households, was able to determine the extent of activity of each branch of production. Nevertheless, this did not involve a genuine system of economic planning but rather the application of a technical plan, and the difficulties brought about by rationing were overcome not by adjustment to market conditions but by the issuance of paper money.

The idea of a controlled economy prevailed in Germany for some time after the war. During a period when serious want contrasted sharply with great luxury it seemed the natural function of the state to provide at least the elementary needs of the masses. In 1918 a definite proposal

for a planned economy, based on the ideas of Walther Rathenau, was put forward by von Moellendorff and Wissell of the national Ministry of Economics. It provided for the creation of a commission composed of representatives of capital, labor, the consumers and the public which was to determine the general lines of production but not to intervene further in the productive process itself. It is quite evident that such a system could never have functioned. The capitalist, if allowed to retain his capital, cannot be told what or what not to produce. The direction of production in any economic system except one under strict administrative control cannot be accomplished directly but only indirectly by the regulation of income distribution. With the end of inflation this program lost its force, for then it was not goods that were lacking but money, and a change in the direction of production would not necessarily divert the flow of money into the proper channels. During this same period a plan for the socialization of the basic industries and especially of the coal mines was advanced by the first Socialization Commission. The report of the more radical majority of this commission was based on the same fundamental ideas as that of the Sankey Commission in England, although the two were developed quite independently. According to this scheme the mines were to be expropriated, but instead of being worked directly by the state they were to be under an independent management receiving its general directions from an official adviser, working with representatives of managers, workers and consumers. The aim was to leave the management free play but to incorporate it as an organ of society. Whatever the final merits of the plan, it did cast aside the idea of war socialism and endeavor to bring a socialized industry into a system of market economy.

An echo of the ideas of a war economy is to be found also in English guild socialism, particularly in its insistence that production should be determined not by the profit motive but by the needs of the population. Simultaneously there were also developed in England schemes for the nationalization of mines, railroads and the Bank of England; but details as to the method of creating a completely planned economic system out of the socialization of these key industries were never worked out. Such ideas of socialization were temporarily pushed into the background both in England and on the continent after 1927 as a result of increasing production. Particularly in the United States,

with its belief in eternal prosperity, reformism gained the upper hand both in social and in economic policy. The notion spread that steadily increasing production and more equitable distribution would result in a harmony of economic interests, thus reviving in another form the ideas of harmony in classical economic doctrine. Technical progress of all kinds, particularly rationalization, seemed to make possible a rapidly and constantly increasing production; and the effect of technological advance in throwing men out of work and in decreasing the possibilities for profitable investment was overlooked. The doctrine of high wages became popular, and in most countries it seemed that unemployment insurance would at least insure the working classes a minimum subsistence during the period of unemployment. Plans were advanced for the proper allocation of public works to lessen the dangers of crises, and the idea of credit control to regulate the course of business through banking policy gained many adherents. At the same time the idea of industrial democracy, demanding greater participation of the workers in the management of industry as well as representation for the consumers, found many supporters. In these latter plans there was a certain similarity to the schemes for national economic councils (*q.v.*) envisaged as the basis of a planned economy by one group of its advocates. Ideas of a planned economic system as well as schemes of socialization were thus in abeyance during the years 1927 and 1928; it was not until after the inauguration of the Five-Year Plan in Soviet Russia that the idea of a planned economy again came to the fore. But it was the crisis of 1929 and the succeeding depression which caused a revival and intensification of criticism of the capitalist system and which led to further elaboration of notions of economic planning.

For a number of reasons the idea of a planned economy became particularly popular in the United States. The boldness of the conception of organizing the entire economic system according to one plan enhanced its attractiveness. In no other country was the scourge of overproduction so strongly felt, particularly in contrast to the previous belief in ever increasing prosperity. Since the crisis in the United States could scarcely be ascribed to the interference of the labor unions, it was all the more evident that something must be wrong with the organization of the market and of production if increased efficiency resulted in poverty, and it was thought

that only a system of planned economy could resolve this paradox.

Theories of economic planning, as they have been developed in the United States, fall generally into two groups. The first consists of those advanced by supporters of capitalism who nevertheless do not believe that the automatic and spontaneous course of economic life guarantees permanent utilization of the productive forces or an increasing social product. Many individuals who formerly believed that under capitalism wages as well as tenure of employment would be permanently improved, and that the concentration of production and the organization of huge cartels would lead to the abatement, if not the total elimination, of economic crises have now become convinced of the fatal weakness of the present system and of the slowness of its recuperative processes and look for a way out in some form of capitalistic planned economy. Under such a system, as envisaged by some capitalists, they would be entrusted with the important decisions, while the authority of the great business concerns would be increased and the control of the entire economic system centralized. Such conceptions have given force to the drive for repeal of the antitrust laws and have led to ideas of the transformation of American capitalism into a system of gigantic and coordinated trusts under the direction of a central national council of the leading financiers and industrialists. It is hardly necessary to point out that such a system would be anything but socialistic in nature. The question of state control in any such scheme of planning also remains unsettled. It is at any rate inconceivable that if the direction of the economic system were to be placed in the hands of the industrialists, the administration of the state could remain independent of them.

The conception of a capitalistic planned economy raises an interesting problem. With full utilization of technical knowledge and with proper allocation of new capital the output of finished products, if not retarded by any further crises, must expand tremendously. A rapid increase of the income of workers and officials and a further reduction of hours of labor would result. It might be expected that there would follow a strengthening of the tendencies toward the socialization of industry, particularly as workers and officials gained increased insight into the problems of industrial management. The unorganized and therefore less easily understood capitalist system seems to the working

classes less susceptible of transformation into a socialistic system than would a completely organized capitalist system. It is not to be assumed, however, that many financial leaders are aware of this possible consequence of an efficiently organized capitalist planned economy. On the other hand, it must not be overlooked that an oligarchically organized capitalism always bears within itself the possibility of an openly Fascist development. For when the control of the means of production is concentrated and the economic system ceases to rest upon a wide middle class of independent industrial and business entrepreneurs, those in power must rely on ever larger armed forces to prevent the outbreak of social revolution. The only alternative would seem to be for the business leaders to mollify the great mass of people by a high standard of living, turning them into a self-satisfied middle class who would never become conscious of the possibility of social change. But at least the social history of Europe does not indicate any likelihood of such permanent leveling of classes.

The second group of advocates of a planned economy in the United States includes chiefly progressive intellectuals who formerly advocated economic reforms and radical social policies, such as the systematic development of public works to mitigate the effects of industrial fluctuations, unemployment insurance, more vigorous control of monopolies and to some extent credit control, although the far reaching influence of this latter device has not been so clearly recognized by these thinkers as by European theorists of planned economy. Such reforms involved merely the incorporation of socializing elements into the free economic system. With the crisis of 1929 these reformist tendencies became oriented about the belief that production should be directed not toward the making of profit but toward consumption needs. In aims and specific programs this second group therefore differs quite markedly from the first, since its adherents reject the idea of transforming the present economic system into an organized oligarchic business dictatorship and advocate a system in which the masses also would have some control of the direction of economic life.

If the concept of economic planning is viewed apart from its peculiar national variations, it is seen to present not only an economic but a social problem of the first magnitude. For the characteristic stamp of every economic order is derived

from the distribution of political power and from the social framework in which it operates. It is this fact which lends such significance to the controversy as to the possibility of a planned economy within a capitalist society. Every planned economic system must be based on a recognition of the unitary character of society. But such a viewpoint might often make necessary the renunciation by an entire industry of all possibilities of profit in the face of more important interests. How can such a result be achieved in a capitalist system? The more complex the organization of the basic productive industries, the more acute do such problems become.

If the question of the social distribution of power is set aside and only the problem of economic relationships and devices is considered, it is possible to envisage the setting up of a system of planned economy even within the capitalist order. A first prerequisite would be some arrangement making possible indirect control of the development of various branches of the economic system in proper proportion to one another, and of total production in proportion to market expansion. This could be accomplished only through some kind of central bureau for the distribution and direction of credit. Such a bureau would supervise the relative growth of individual industries and also the financing of new industries, in so far as these were made necessary by the technological displacement of labor. One of the most difficult problems with which it would have to cope would be that of self-financing. In a capitalist system this could not be controlled directly, since producers could not be forced to deposit their profits with a central banking system. A credit control bureau might, however, temporarily forbid new investments in industries which had expanded too rapidly. This is a device which has already been applied in a few specific instances, such as the prohibition of hotel building in Switzerland or of the sinking of potash shafts in Germany. The method is cumbersome, but it would prevent the most dangerous manifestations of industrial vanity or competitive struggle.

The planned distribution of credit would lead to a more balanced development of production. It is obvious, however, that under a capitalist system the aim of credit control would not always include the satisfaction of important social needs. Under such a system it would be impossible moreover to set in motion production to care for unemployed workers except through

public works schemes, and these could not be inaugurated on any wider scale than is at present possible. This type of planned economy would take its point of departure from the existing distribution of income and market demand. Its task would consist only in correcting the disproportionate development of production, viewed from the standpoint of market conditions; such changes in the distribution of income as were found to be essential to the better distribution of purchasing power could be brought about simply through taxation.

The free application of credit control and of more equitable income distribution would exert a real influence upon the development of the entire economic system, tend to prevent the most dangerous features of crises and facilitate the building up of the intermediate industries, which are so essential to the labor market. The fear, frequently voiced, that such a planned economy could not secure the necessary rate of capital accumulation is unfounded, since it could avoid the loss sustained by existing capitalist society which is due to the fact that a great part of the capital invested results in a simultaneous loss of capital at some other point in the economic system, and since it could rely upon the saving of capital made possible by the latest technical advances.

More serious difficulties arise at other points; for instance, in connection with foreign trade. Every system of planned economy must attempt to settle the question as to how far it should coordinate its foreign trade and convert it into a monopoly. In a country with a relatively large and varied foreign trade even the creation of a complete monopoly would not necessarily lead to economic planning. For so long as private production continued, such a foreign trade monopoly could only accept the orders of these producers; it would have no interest in decreasing exports and no power to increase them. It would be even more difficult to influence the direction of production through control of imports. Such influence is far more easily effected through control of the distribution of credit. Indeed the idea of a monopoly of foreign trade as it has been applied in most of the European countries in recent years is an outgrowth of the abnormal conditions during the World War and the succeeding periods of inflation. In so far as industry is socialized, it is natural for the related export and import trade to be under the control of the same agency; so long, however, as industry and agriculture remain under private control, foreign

trade cannot be monopolized separately. Apparent exceptions in the case of single products, especially raw materials, represent no tendency toward economic planning.

Under a plan which does not attempt a central administrative control of the entire economic system the great mass of processing and consumption goods industries can be controlled only indirectly. While the danger of overinvestment is not as great here as in the basic industries, their rate of increase must be watched; and in such industries too the question of socialization will arise wherever mass production develops. No one, however, would consider it possible to bring all such industries under one common economic organization at one stroke. And for the thousands of intermediate and lesser industries, particularly small scale agriculture, the magnitude and character of production need never be exactly prescribed in the total plan. For, freedom in consumption also implies some flexibility in production; and a planned economy does not necessarily involve the abandonment of the advantages of free mobility of private industry to the extent that it remains free and private, as is no longer the case under capitalism in the giant industries. The line of demarcation between those processes of production to be directly managed and those to be only indirectly influenced would not be easy to fix and would no doubt be altered from time to time. Nevertheless, with the basic industries and the credit system under the firm control of a socialist planned economy, the smaller manufacturing industries could not become independent centers of power and might even be brought into some form of cooperative organization and thus be directly absorbed into the planned system.

One of the major problems of the capitalist system in its later phases has been the development of new industries to provide new opportunities for labor. Before the World War the opening up of precapitalist areas provided a wide field for capital investments. Since the war this process has stopped not only because of political insecurity but also as a result of the extension of technical progress to the production of the means of production. Under a planned system a reduction of hours of labor could offset the effects of technological advance. It would then be possible also to maintain in operation industries which yielded returns sufficient merely to pay for the costs of production, and hence production could be expanded even though

technical changes had removed the possibility of profits. The continuation or expansion of industry would be temporarily possible even at a loss, since it could be made up either through taxation or through a limited change in the value of money.

If under a planned economy the productive forces should not be fully utilized, it would be essential to expand those industries which produce consumers' goods. With a corresponding distribution of income this would be possible so long as the mass needs of the population were not completely satisfied. At this stage further technological advance would be taken care of by the shortening of the average hours of labor. If the need for work as a natural outlet of vital energy found insufficient satisfaction within the economic system, there would be other outlets in public and artistic activities. Even the mention of such a possibility appears completely utopian, and it is of course true that no planned economy could hope to develop its productive forces sufficiently to make such a condition possible within the immediate future. The length of time which would elapse before such a situation were reached would depend also on the degree of balance in the distribution of income achieved by the plan.

From an examination merely of the economic questions involved in the creation of a planned economy it is clear that the erection of such a system is not a purely technical and not even a purely economic problem. It cannot be achieved through reasoning alone, for no plan however perfect will be realized merely by virtue of its perfection. The construction of a new economic system depends more upon the distribution of power than upon the elaboration of concepts, and common sense fails to reveal the path on which all social forces will unite. The real social problem involved is that of the nature of the social framework within which the economic system should be constructed.

A survey of present day capitalist society indicates some of the probable lines of future development. The system of free competition has in fact already been narrowly restricted, although intellectually it still holds sway. In Germany in particular there has been considerable intrusion of the will of the state into the direction of the economic system. Nowhere in Europe is the power of the working classes great enough to exert any decisive influence upon the course of economic policy, although it is sufficient to offer prolonged resistance to a lowering

of their standard of living. The direction of the entire economic system is in the hands of the capitalists and bankers. Viewed from the aspect of the social distribution of power, the economic order is today in a transitory state in which elements of free competition are mingled with elements of partial organization. Such an "order" contains within itself the greatest contradictions. The energy of the entrepreneur has no sufficient outlet, while the regulating forces are too weak to bring about a better organization of the entire system. Nevertheless, despite its obvious failings such a condition may well endure for a long time. Those in possession of the economic control will certainly struggle to retain their power as long as possible, utilizing their political strength to gain popular support and where possible the acquiescence of the workers. A return to competitive capitalism is not to be envisaged, since technological development alone has made inevitable the transition to giant industry and even to monopoly. Nor is it possible to undo the concentration of the banking system, since in many countries the state has become in practise the guarantor of the total deposits of the great banks. While central control of the disposition of society's capital may result, real planning is still far distant. Even in central Europe it is not likely to be brought about by any sudden political upheaval. The middle classes can too easily be mobilized against any attempt at a real planned economy; for although in times of crisis they are always disposed to indulge in anticapitalist phraseology, they are instinctively strongly bound to the capitalist system.

There would thus seem to be two possibilities of future development. The first is that, faced with increasing difficulties and the aggravation of the industrial crisis, capitalism itself will be forced into radical socialization of the basic industries and establishment of control over investments and credit. Such a step would result in a real postponement of social reconstruction. On the other hand, it is not at all impossible that an expansion of world production may follow the present depression, particularly with a clarification of the relations with and in the Far East and with the participation of capitalist countries in the development of these areas. In such an event, while it is not probable that all the unemployed would be reabsorbed, stability would increase and capitalist economy remain in a transition stage in which elements of free enterprise would be mingled with regulating forces.

It is idle speculation to inquire what the final stage of such development would be or through what steps it would pass. An attempt to foresee the course of economic development may be likened to wandering in a fog: one can recognize only the immediate step ahead. It is the sense of direction which offers the sole security, and the direction of modern society would seem to be toward a planned economy.

EMIL LEDERER

See: NATIONAL ECONOMIC COUNCILS; STABILIZATION, ECONOMIC; PRICE STABILIZATION; CREDIT CONTROL; SOCIALIZATION; GUILD SOCIALISM; SOCIALISM; GOSPLAN; ECONOMIC POLICY; GOVERNMENT REGULATION OF INDUSTRY; GOVERNMENT OWNERSHIP; MONOPOLY; LARGE SCALE PRODUCTION; RATIONALIZATION; WAR ECONOMICS.

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NATIONAL INCOME may be defined provisionally as the net total of commodities and services (economic goods) produced by the people comprising a nation; as the total of such goods received by the nation's individual members in return for their assistance in producing commodities and services; as the total of goods consumed by these individuals out of the receipts thus earned; or, finally, as the net total of desirable events enjoyed by the same individuals in their double capacity as producers and consumers. Defined in any one of these fashions national income is the end product of a country's economic activity, reflecting the combined play of economic forces and serving to appraise the prevailing economic organization in terms of its returns.

Being thus a summary and appraisal notion rather than an analytical entity, national income demands statistical measurement. It has been estimated in money terms over a number of years for the principal countries of the world. A selected group of such estimates is given in Table 1. Specific measures of this type seem at first glance to convey information of crucial importance. Since the end product of each country's economic system is an index of its producing power, income estimates furnish a comparison of the productivity of nations. Per capita income figures, especially when adjusted for differences in purchasing power of money, appear to measure the nation's economic welfare. A continuous series of annual estimates of total or per capita income would reflect also the constancy of the income flow, another important criterion of economic welfare, and, if the series were long enough, would suggest whether the nation tended in the course of time to grow richer or poorer and how rapidly the change was taking place. Estimates of total income are also employed in ascertaining the proportions in which it is or may be divided among social classes, between the community and the individual, between consumption and capital accumulation, and the like. However used, figures like those given in Table 1 appear to be quite serviceable; they seem to measure in comparable units something quite definite and significant.

Further investigation reveals, however, that the clear and unequivocal character of such

Slavs and Teutons in their fifteenth century conflicts and by Frenchmen and Englishmen in the concluding phases of the Hundred Years' War. Yet, when liberal allowance has been made for these and other evidences of a historic nationalism which succeeded primitive tribalism, the fact remains that it was more spasmodic and less commanding.

In modern times and with continuously waxing strength since the seventeenth century nationalism has reemerged, first in Europe and then in other continents. It is akin to primitive tribalism in that it directs the supreme loyalty of its adherents to a community of language, customs and historic traditions. But it differs from primitive tribalism in noteworthy respects. Instead of being based on a small group of persons, banded together by actual blood relationship and by identity of religious practises and economic interests, it is based on a relatively large group of persons connected very distantly, if at all, by blood, professing almost any religion, or none at all, and having widely divergent economic interests. Modern nationalism, thus depending on larger units and being less substantial than primitive tribalism, is more artificially engendered and propagated; it relies more on conscious purposefulness, on the written and particularly on the printed word and on a special kind of mass education.

Modern nationalism has been a vital part of an extraordinary complex of economic, political, social and intellectual developments: the invention and spread of printing; the rise of national vernaculars as literary languages, accompanied by the decline of Latin and other international languages; the revolutionary growth of capitalism and of the middle classes; the role of aggressive divine right monarchs in suppressing feudalism and in consolidating and secularizing their realms on a national basis; the religious upheavals which eventuated in the disruption of Christendom and the establishment of state churches; the increasing commercial contacts and competition of one people with another, especially of "progressive" peoples with "backward" peoples; the changing emphasis from what is common to mankind to what is peculiar to a nation; the rise of humanitarianism, of individualism and latterly of the democratic spirit.

These developments took place first in western Europe. Here, from the fourteenth to the eighteenth century, national states were being formed and solidified by the cooperation

of ambitious monarchs with the rising middle classes against local feudalism and cosmopolitan ecclesiasticism. The economy of rural manor and urban guild was being transformed by the same means into a national economy, with the express purpose of regulating domestic industry and foreign commerce and colonization so as to promote the "wealth of the nation." Feudal and interurban warfare was being supplanted by warfare on a grander scale between nations, either for the dynastic aggrandizement of monarchs, who were becoming symbols of national power and prestige, or for the commercial and colonial advantage of upper and middle classes, who were becoming enthusiastic exponents of national, as against local or cosmopolitan, interests. Simultaneously apology for national interests and praise of national exploits, especially of military and colonial achievements, were being penned and communicated ever more widely within each nationality as more and more authors confined themselves to the common speech of the masses and utilized printing presses.

By the eighteenth century, thanks to geographical situation as well as to historical circumstance, England had experienced all these developments more fully than any other country in western Europe. By this time there was a lively English nationalism. From Milton and Locke in the seventeenth century to Bolingbroke, Blackstone and Burke in the eighteenth, abundant rationalization was provided for the nationalist ardor which already burned in the breasts of the agricultural upper classes and the commercial middle classes and which was shared in greater or lesser degree by the masses. Divine right monarchy, it is true, had been overthrown in fact if not in name, but it had already performed its nationalist role. A similar part was now played even more effectively by an aristocratic Parliament, whose members, drawn almost wholly from the patriotic upper and middle classes, could sincerely identify their own economic interests with national interests and could freely forward them amid popular approbation. This English nationalism of the eighteenth century was both cultural and political. On the political side it was aristocratic. Pride in being Englishmen and in possessing English traditions was the prerogative of all who spoke the English language as their mother tongue, but control and direction of English policies and real leadership in English nationalism were reserved to the upper classes.

In most countries on the continent, even in western Europe, nationalism was less advanced. In France, it is true, there was a rapidly rising consciousness of nationality and there had long been a form of national monarchy. But even here the sharp cleavage between social classes and the traditional loyalty of the masses to locality or province militated against national solidarity; and the Bourbon kings continued to address their subjects not as the "French" people, but as the peoples of Languedoc, Gascony, Burgundy, Picardy and other regions which had been acquired by earlier French monarchs. Devotion to dynasty seemed still to outweigh devotion to nationality, and *pays* to be more fundamental than *patrie*.

Elsewhere in the eighteenth century there might be stirrings of national consciousness and some pleas from intellectuals for cultural nationalism, but there was little nationalism of a strictly political sort. No monarch based his domestic or foreign policy on the principle of nationality. The masses divided their allegiance between the immediate locality in which they lived and the remote prince or king or emperor whom they had been taught to honor and obey. The upper classes served the non-national interests of themselves or their prince, and many of them, despising the national language as vulgar, adopted the current fashion of using French and posing as enlightened cosmopolites. There was no national school system, and armies were professional and mercenary rather than national.

In Germany, for example, no one in the eighteenth century expressed any desire for political nationalism. German intellectuals, equally with German nobles and peasants, seemed quite content to leave the fatherland parceled out among some three hundred separate and practically independent states and to suffer the domestic conflict of Hohenzollerns and Hapsburgs and the shift of the interest of the latter, the nominal leaders of Germany, from the home scene to the alien scenes of Hungary, Italy and Belgium. Very few Germans then talked about the desirability, much less the possibility, of unifying the hodgepodge of German kingdoms, duchies, counties and free cities into a compact national state and inculcating in all its inhabitants a new national loyalty which would transcend their traditional local loyalties.

Yet in this same Germany of the eighteenth century certain intellectuals taught the utility and practicability of a cultural nationalism. To

this end several factors contributed. One was the rise of Pietism, which represented on the part of a goodly number of clergymen, especially Lutheran clergymen, an enthusiasm for the "simple faith" of the common people as against the dogmatic and formal religion of the highly educated or the highly stationed. This meant a special regard for the masses, for their beliefs and observances, for their mores, and at the same time a special concern with elementary schooling so that the poor as well as the rich would be enabled to read the Bible in the common German tongue. Another factor contributing to the same end was the development of the *Sturm und Drang* and romantic movements, which brought about increased interest in folk language, folk literature, folk customs and folk personality and which in turn led to the emergence of the ideas of national language, national literature and national culture.

Meanwhile in France there was being implanted the seed of a novel type of nationalism—not a traditional, aristocratic nationalism such as was then flourishing in England and not a merely cultural nationalism such as was taking root in Germany and elsewhere, but a revolutionary democratic nationalism. Throughout the eighteenth century there was a marked quickening of national consciousness in France, an obvious tendency to distinguish between the monarchy and the nation, to exalt the latter while finding fault with the former. In the spirit of the current enlightenment attacks multiplied against the traditional and presumably irrational nature of many existing institutions—against divine right kingship, against the Catholic church (and supernatural religion in general), against privileges of class, province or profession, incidentally against the very historic developments which had been unfavorable to nationalism. In the spirit of contemporary "classicism" moreover praises were sung of the civic spirit of ancient Athenians, Spartans and Romans, and the meaning of the antique Latin word *patria* and its derivative "patriotism," although originally associated narrowly with a town or a locality, was now stretched to designate an ideal loyalty to the whole national state of France. Presently too in the spirit of rising romanticism a new enthusiasm manifested itself, especially in Rousseau, for the republican simplicity and virtue which would characterize France when the "common" and "natural" people should be rid of social discrimination and by exercise of their general will should usher in

a new regime, not only of liberty and equality but also of fraternity.

All these speculations were received with sympathy and ever louder acclaim by the expanding middle class, by a considerable number of peasants and artisans and by some upper class persons whose enlightenment or romanticism was superior to their class consciousness. And just such speculations were realized in substance by the great French Revolution of 1789-95, a noteworthy landmark both in the history of individualist democracy and in the evolution of modern democratic nationalism.

The French Revolution created a truly national state, in which distinctions of class and locality were abolished, the church was secularized and all political as well as ecclesiastical institutions were put on a national basis and made to serve national ends. It also enunciated the doctrine of national self-determination, that the members of a nationality have the right not merely to exercise popular sovereignty within the state of their birth but also, regardless of previous treaty obligations, to detach the place of their birth from any alien dominion and unite it with the national state of their choice. This right the new French nationalists invoked as justification, against the protesting exponents of treaty rights, for their incorporation of Avignon, Savoy, Nice and Belgium into France.

Likewise the French Revolution inculcated the doctrine that all citizens owed their first and paramount loyalty to the national state, and it sought in various ways to infuse them with an ardent national enthusiasm. It prescribed quasi-religious rites before altars of *la patrie* and over the remains of the dead fallen *pour la patrie*. It devised such nationalist symbols as a national flag, a national anthem and national holidays. It insisted upon linguistic uniformity and undertook to root out of France all foreign languages and local dialects. The French Revolution moreover elaborated the first general scheme of elementary schooling which should be maintained and controlled exclusively by the nation, which should be compulsory for all the boys and girls of the nation and in which national patriotism and national duty should be taught equally with the traditional subjects of reading, writing and arithmetic. The revolution too adopted and gave effect to the principle of the "nation in arms," the principle that all able bodied male citizens should be trained for war and liable to conscription for military and naval service. Finally, the French Revolution inspired the es-

tablishment of new kinds of newspapers and patriotic societies for the propagation of intense and sometimes quite intolerant nationalism among the masses.

So convinced were the French revolutionaries of the blessings of the new democratic nationalism for themselves that they were unable to conceive how it could fail to bless all other peoples. It was a peculiarly French mission, they believed, to spread the new gospel; it was in the highest sense humanitarian to spread this gospel, if necessary, by the sword. In December, 1792, the National Convention decreed: "The French nation . . . will treat as enemies every people who, refusing liberty and equality or renouncing them, may wish to maintain, recall, or treat with a prince and the privileged classes; on the other hand, it engages not to subscribe to any treaty and not to lay down its arms until after the establishment of the sovereignty and independence of the people whose territory the troops of the [French] Republic shall have entered and until the people shall have adopted the principles of equality and founded a free and democratic government."

The English were already too strongly impregnated with their own traditional and aristocratic nationalism, and the other peoples on the continent were still too much devoted to localism or class interests or dynastic loyalty—in other words, they were too lacking in any kind of political nationalism—to heed at once the French pleas for democratic nationalism. Indeed large numbers of Germans, Netherlands, Spaniards and Italians—as well as Englishmen—actively supported their respective sovereigns in armed attempts to suppress what they termed the "excesses" of the French Revolution. Probably, as so often happens to missionary enterprise, what seemed altruistic and messianic to the crusaders appeared to their beneficiaries (or victims) to be selfish and downright satanic.

At any rate the French Revolution precipitated a series of gigantic international wars, in the protracted course of which the French themselves subordinated political democracy and individual liberty to military dictatorship in the person of Napoleon Bonaparte, won glory for themselves more than freedom for others and allowed the new democratic nationalism to become identified with militarism more than with peace. The wars, whether in their earlier republican aspects or in their later Napoleonic phases, stimulated enormously the national patriotism and national pride of the French

people. Eventually too they did much to arouse nationalist feeling among other peoples on the continent of Europe and similarly on the American continents. On the already developing cultural nationalism was now superimposed, in imitation of the French or in reaction against the high handed interferences of Napoleon, a yearning on the part of many Europeans for some form of political nationalism. Spaniards, Portuguese, Germans, Scandinavians, Italians, Poles, Greeks and southern Slavs gradually turned to the principle of nationality as a most promising aid to domestic harmony and self-respect and as a most efficacious safeguard against foreign exploitation and conquest. The leaders of these embryo movements in the first two decades of the nineteenth century were largely of the professional middle class, but some noblemen and clergymen participated conspicuously in them; and in certain cases even such dynasts as the Hohenzollerns, Hapsburgs or Romanovs found it convenient, at least temporarily and in emergencies, to champion the cause of political nationalism. This partially explains the rivalry of Hohenzollern king and Hapsburg emperor for leadership in the reconstruction of Germany and likewise the ambition of a Romanov czar to pose as the national king of Poland and to give succor to Greeks and south Slavs in their national rebellions against the Ottoman Empire.

The last great European statesman to oppose political and cultural nationalism consistently and with a large measure of success and to labor consciously to retain the earlier localism and cosmopolitanism was Metternich. His was the finally decisive role in the overthrow of Napoleon and the restoration of the Bourbons in France. His was the chief authorship of the territorial rearrangements effected at Vienna in 1815, the rejection of the doctrine of national self-determination and the redistribution of peoples among polyglot empires or petty principalities. His also was the chief guidance of those alliances of divine right monarchs who from 1815 to 1848 kept the principle of nationality out of the public law of Europe and cooperated to thwart the development of nationalism as well as liberalism and democracy in Italy, Spain, Germany and Poland. Yet nationalism, both cultural and political, continued to win converts and to make headway. Metternich could not anywhere wholly suppress nationalist propaganda, not even within his own Austrian empire; he had to acquiesce in the establishment of national states for Greeks, Serbs,

Belgians and Latin Americans; and he himself was deprived of power and influence by the nationalist upheaval of 1848.

From 1815 to 1880 nationalism in Europe and America—the only continents where it was as yet significant among civilized peoples—was closely related to liberalism. Nationalism had been too long a tradition in England and after the French Revolution it was too omnipresent in the continental atmosphere to be disregarded by such intellectual and “progressive” persons as the leading liberals. Liberalism could best be realized, it was believed, within the framework of a national state, within an England or a France or within a newly unified Italy or Germany rather than within an extensive, autocratic and privilege ridden empire, like the Austrian, the Russian or the Ottoman. Besides, much of the research of liberal scholars—historians, anthropologists, philologists—was romantically consecrated to the language and folklore, to the legal and political heritage, of particular peoples; and this research further stimulated the nascent cultural nationalism of Germans, Latins, Scandinavians, Slavs and Magyars. Both cultural and political nationalism became integral parts of nineteenth century liberalism.

This liberal nationalism, like that of the democratic French revolutionaries, was humanitarian in object and preachment; and if a bit timid about too rapid experimentation with political democracy, it was thoroughly sympathetic with the principle of national self-determination. It would redraw the political map of Europe—and of the world—so that disjointed parts of the same nationality would be knit together in a common polity, and supranational empires would be broken up into their constituent national parts. It would make nationalities rather than states the units of “international” relationship and law. At the same time, however, the foremost liberal nationalists, unlike their democratic French predecessors, were strenuously pacifist by conviction and policy. Romantic liberals reacted sentimentally against the bloodshed, as well as against the despotism, of the French Revolution and the Napoleonic wars. Industrial liberals were convinced that war did not pay: it interfered seriously with commercial intercourse and it put heavy tax burdens on industry. For compulsive conflict in arms should be substituted free competition in material and intellectual production, not only within a nation but likewise

between nations. Let each nation like every individual exercise the right of self-determination; then, according to liberal doctrine, each would eschew imperial ambitions and monopolistic enterprises and pursue policies of free trade and peace.

Liberal nationalism inspired many intellectual, social and political developments between 1815 and 1880. In existing national states, such as England and France, it tended finally to replace aristocracy with middle class government, to enlarge the basis of direct personal participation in public affairs and to create popular sympathy for the efforts of "oppressed" and "enslaved" nationalities to free themselves from alien domination. Among these latter nationalities liberal nationalism did much to exalt the popular tongue, to resuscitate folk songs and folk customs, to revive or invent national traditions, to arouse popular enthusiasm for national heroes of the past and for the contemporary cause of national freedom and unity. Overseas the beginnings of national self-government in the British dominions of Canada, Australia and South Africa were a peaceful accompaniment of liberal nationalism.

In one very important respect liberal nationalism failed. It could not realize its ideal of basing the state system of Europe on the principle of nationality without sacrificing its ideal of pacifism. Subject and divided nationalities could not be freed or unified unless great empires were dissolved and local potentates were dispossessed, and such heroic action required more than a pious wish on the part of middle class liberals. Moral support of the masses at home and diplomatic aid of foreign governments were needed, and even then they seldom achieved their ends without armed insurrection and bloody war. So fighting became the practical means of transforming cultural into political nationalism. Under liberal auspices occurred the terrible rebellions of "enslaved" Greeks and Slavs against the Ottoman Empire and of "oppressed" Latin Americans against Spain; the riots of 1820 in Italy and Spain; the widespread insurrections of 1830 in France, Belgium, Germany and Italy; the even more widespread and deadly insurrections of 1848 in France, Germany, Italy, Switzerland, Bohemia, Hungary and Ireland; the Polish uprisings of 1831 and 1863; the Crimean War of 1854-56; the wars of Italian unification in 1848-49, 1859-60, 1866 and 1870; the wars of German unification in 1848-49, 1864, 1866 and 1870-71; the Balkan

war of 1877-78; and the mighty struggle of 1861-65 in the United States for the preservation of the national union and the emancipation of an enslaved race.

By 1880 some progress toward a new national and presumably liberal state system could be recorded. France and England and a considerable number of other countries in western Europe were under liberal governments. Germans and Italians possessed national states, as did likewise, with full independence or a large measure of autonomy, Greeks, Serbs, Rumanians, Bulgarians and Latin Americans. The people of the United States were more completely committed to nationalism, if not to liberalism.

Since 1880 greater progress has been made toward a world wide acceptance of nationalism, although the liberal element has notably lessened. This latest phase of nationalism, which tends to be more and more illiberal, seems to be closely associated in its origin and extension with the whole complex of developments which characterize most recent industrial civilization.

Peculiarly basic has been the development of large scale machine industry, with the impetus it has afforded to the growth of middle class and proletariat, to the improvement of means of transportation and communication and to the rivalry of peoples for economic advantage. In the main nationalism has flourished most abundantly in national states which have been most industrialized, and the advent of the industrial revolution among "oppressed" nationalities has been the most potent factor in arousing their national consciousness and in enabling them to create national states of their own. It has been naturally so. For, while industrialization favors commercial intercourse between peoples, it is even more conducive to commercial intercourse within each nation. It is easier and more natural to do business with persons who speak and read one's own language than with others. Exports and imports of an industrialized nation do not equal in value what it buys and sells at home. Credit and banking function nationally far more than internationally. Labor is organized by nations, and if it has international affiliations it subordinates them to what it considers to be its particular national interests. There is much more travel by people within a nation than between nations. There is more news in the public press about one's own nation than about others.

These consequences were not so obvious to

the economic liberals of the period from 1815 to 1880, when the industrial revolution was centered in England and was just beginning to affect other countries, as they have been to neo-mercantilists since 1880, with the revolution spreading rapidly all over Europe and America and even in Asia. If the whole world could have been industrialized simultaneously and uniformly, national differences might not have been emphasized and the liberal dream of "peace and universal brotherhood through free trade" might have been realized. Actually, however, no two countries have been at any given time in exactly the same stage of industrialization, and especially since 1880 each partially industrialized country has utilized the sentiment of nationalism and the power of national government to protect by tariffs and bounties its own industry against foreign competition and by labor legislation and restriction of foreign immigration to raise the standard of living of its own population. This is the new economic nationalism, which, assuming significant proportions in Germany and the United States early in the 1880's, has been seized upon and pursued with generally augmenting intensity by every civilized nation. Everywhere it has transformed economic interests of the masses as well as of the classes into national interests and has provided substantial foundation for the almost universal contemporary habit of referring to "national wealth," "national resources," "national production," "national labor supply."

With the speeding up and spread of the industrial revolution moreover it has been proved practicable in one nation after another, with increasing rapidity since 1880, to carry to unforeseen lengths certain developments which the democratic nationalists of the French Revolution had inaugurated—the democratic spirit itself, popular schooling, compulsory military training, cheap popular journalism and efficient societies for popular propaganda. The democratic spirit has been immensely quickened in the melting pot of modern cities, and the enormous migration from country to town, from farm to factory, has served to weaken traditional local ties and to identify the new democratic spirit with the new nationalism. With democratic pressure the augmenting financial resources of industrialized national states have been applied more and more to the establishment and maintenance of armed forces, in which every citizen is liable to service, and of public schools, in which every citizen is taught to read

and write. Armies and schools are alike quite national in organization and effect; while both are ostensibly humanitarian, the one to insure international peace and the other to promote individual well being, each is used primarily to inculcate in the masses a supreme devotion to their respective nationalities and national states.

There is still another very important element in most recent civilization which must be mentioned—the supplanting of the intellectual and cultural vogue of romanticism by what has conventionally been termed "realism." This realism has been the product of a variety of novel factors: absorption in the mechanical and utilitarian aspects of the industrial revolution; admiration for the "practical man" of big industry and big finance; acceptance of a mechanistic theory of the universe and of a materialist interpretation of human behavior; interest in sociology, with its "laws of society" and its fact finding inquests; distrust of human reason and trust in pragmatism and human will; adaptation of the biological hypotheses of Darwin to support such conceptions as the inequality of races, the "struggle for existence" and the "survival of the fittest"; enthusiasm for Nietzsche's "red blooded men" and for his "superman." The vogue of realism has paralleled not only the intensification of the industrial revolution but the rise of Marxian socialism and revolutionary syndicalism and also an epochal transformation of nationalism.

To this transformation the wars for national unification in Germany and Italy (from 1859 to 1871) contributed in no small degree. They had originally been undertaken by altruistic liberals for liberal ends, but eventually they evoked a strongly nationalist spirit of militarism and a boastful pride in the nation's achievement and the nation's mission. Then, backed by statesmen, business men and intellectuals who were falling under "realist" influences and fortified by effective agencies of popular propaganda, nationalism grew less and less liberal and more and more militarist, imperialist and intolerant. Such was the case not only in Germany and Italy but also in older national states, such as England, France and the United States, and presently, with the onward sweep of the whole complex of modern civilization, in Russia, Hungary, the Balkans and Japan. In the new circumstances free nationalities armed themselves with guns and tariffs as they had never been armed when they were "oppressed," and they entered into acute rivalry, military and

economic, with one another. At the same time, feeling that because they had won their own independence they must be better and more heroic than any other nation and mindful of economic needs and the duty of "superior" races, such nations as could proceed to conquer and impose their rule on "inferior" and "backward" nationalities. Usually with force and popular acclaim the nationalist great powers built huge new colonial empires after 1880. Simultaneously and with like acclaim many national states after 1880 displayed at home a highly intolerant attitude toward racial and linguistic (and sometimes religious) minorities among their own citizens; the official process of "nationalizing" such minorities was known by different names in different countries—Russification, Germanization, Magyarization and so on. Short of formal state action private societies and political parties waged vigorous campaigns, in the name of nationalism and on a wide front, against the Jews—in Germany, Austria, France, Rumania, Russia and elsewhere. The emergence of Zionism at this time was in part a Jewish reaction to the stimulus of antisemitism.

Nationalism paved the way of statesmen and prepared the mind of peoples for the World War. The costliest and most widespread and most terrible in human annals, this war was chiefly nationalist. Its immediate cause was the murderous activity of a secret nationalist society of Yugoslavs. Its fighting was done by "nations in arms," whose morale was sustained by nationalist propaganda through schools, press and special associations. Its most obvious immediate result was the triumph of the principle of national self-determination in central and eastern Europe. The last of the non-national empires on the continent were shattered—the Austrian, the Russian and the Ottoman—and from their ruins were constructed new or enlarged national states—Finland Estonia, Lithuania, Poland, Czechoslovakia, Yugoslavia, Rumania and Greece.

The World War not only issued from nationalism but led to a more intense nationalism. In Europe the newest national states almost instantly passed from liberal pronouncements to illiberal conduct and speedily vied with older national states in establishing nationalist tariffs, armies, schools and other agencies of propaganda and in discriminating socially if not legally against dissident minorities. In connection with this last statement it should be remarked that while the new map of Europe conformed in general to the principle of nationality, the

population in some parts of the continent was so mixed in nationality or a particular region was so insistently demanded by one of the victors for commercial or strategic considerations that all the new national states (and some of the old) embraced minorities of alien nationality. To those states the temptation of "nationalizing" their minorities was strong, while states like Germany and Hungary were at least equally tempted to regard the populations and areas which they had lost as "irredentas" which must be regained as soon as possible. Agitation for the recovery of "irredentas" and movements for the "nationalizing" of minorities are alike dangerous to internal and international peace.

Then too, taking advantage of economic distress and of the enhanced nationalism of the post-war period, demagogues and dictators have risen to positions of influence or power in several European countries and have used their position to preach or enforce an ever more intensive and exclusive nationalism. The most striking illustrations of this have been the conversion of Mussolini from socialism to nationalism and the establishment and maintenance of his Fascist regime in Italy and the ascension to power of Hitler and the Nazi movement in Germany with their hostility to Jews, Poles, the French, Catholics and any other groups at home or abroad who are assumed to belie or belittle German nationalism. Somewhat similar phenomena have attended post-war dictatorships in Poland, Lithuania, Hungary and Yugoslavia and, on widely different intellectual levels, the propaganda of the Ku Klux Klan in the United States and of the Action Française in France.

In contemporary Russia the Communist dictatorship, while theoretically basing itself on the doctrine of the class struggle and claiming that extreme nationalism must pass with the passing of capitalism, has actively patronized cultural nationalism and is actually pursuing such social policies as are likely to prove especially effective in attaching the Russian masses to their national state and filling them with patriotic ardor. It seems in general as if Marxian socialism in power may readily reverse the historic role which it played when out of power and become quite nationalist; a dictatorial social democracy might well contribute even more than a bourgeois political democracy to national solidarity and hence to nationalism. The twentieth century has already shown that at least with certain individual socialists and revolutionary syndicalists enthusiasm for class conflict can fairly

quickly be transmuted into enthusiasm for national conflict.

Notable features of post-war nationalism have been its stimulation among relatively small or hitherto submerged nationalities in Europe and its rise among great and mixed populations in Asia. In Europe not only has there been an increase in the number of small sovereign national states, not only have such nationalities as the Finns, Estonians, Latvians, Lithuanians, Czechs, Irish and Catalans acquired political independence or autonomy, but more or less insistent nationalist demands have been voiced by Flemings, Bretons, Basques, Scots, Icelanders, Ukrainians, White Russians, Macedonians and Maltese. The trend appears to be toward smaller cultural, and political, units.

In Asia, although the Japanese evinced a kind of nationalism in the seventeenth century, they learned a good deal about it as well as about other matters from Europe in the nineteenth century. Nationalism in its modern form, with its industrial and social accompaniments and with its systematic propaganda through schooling, military service and popular press, has become a vital force in Japan only since 1870 and in other Asiatic countries even more recently. Indeed it is only in the post-war period that nationalist movements have assumed highly significant proportions in China, India, Persia, Mesopotamia, Syria and Egypt. It may be added that the recent so-called Indian renaissance in Mexico and various countries of South America is essentially nationalist.

Nationalism is now obviously a world wide phenomenon, vitally affecting both the material and the intellectual development of modern civilization. It tends more and more to influence the economic and spiritual as well as the political relationships of mankind. It is so closely related to the whole complex of contemporary culture that any change in its direction or intensity would seem to wait upon an alteration of other factors in the complex.

CARLTON J. H. HAYES

See: NATIONALITY; PATRIOTISM; CHAUVINISM; COSMOPOLITANISM; INTERNATIONALISM; REGIONALISM; MINORITIES, NATIONAL; IRREDENTISM; INTOLERANCE; RACE; RACE CONFLICT; ETHNOCENTRISM; ETHNIC COMMUNITIES; ISOLATION; ASSIMILATION, SOCIAL; AMERICANIZATION; EUROPEANIZATION; ROMANTICISM; TRADITIONALISM; MESSIANISM; IDEALISM; LIBERALISM; DEMOCRACY; FRENCH REVOLUTION; JACOBINISM; FRONTIER; BOUNDARIES; NATIONAL DEFENSE; MILITARISM; WAR; IMPERIALISM; ECONOMIC POLICY; PROTECTION; MERCANTILISM; ALLEGIANCE; STATE; AUTONOMY; FEDERALISM; WORLD WAR; PAN-MOVEMENTS;

ACTION FRANÇAISE; IRISH QUESTION; NEAR EASTERN PROBLEM; EGYPTIAN PROBLEM; FAR EASTERN PROBLEM; CHINESE PROBLEM; KUOMINTANG; INDIAN QUESTION; PAN-ISLAMISM; ZIONISM; PAN-AMERICANISM; KU KLUX KLAN; FASCISM; NATIONAL SOCIALISM; GERMAN; PROPAGANDA; PRESS; LANGUAGE; DIALECT; CIVIC EDUCATION; BOYS' AND GIRLS' CLUBS; HISTORY AND HISTORIOGRAPHY; INTELLECTUALS.

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NATURAL RIGHTS. The doctrine of natural rights can be traced back through mediaeval and ancient times. It acquired its main significance, however, in the English, American and French experience of the seventeenth and eighteenth centuries. Natural rights are possessed by individual human beings, not by corporate organizations; that is, the doctrine is a part of modern individualism. These rights form a system of value judgments erected into metaphysical absolutes. Their value and use as metaphysics and their relation to the specific historical situation in which they were formulated are both worthy of brief consideration.

The natural rights movement represents one aspect of the eternal human tendency to distinguish between what is and what ought to be; the element of right is definitely an ethical norm, an assertion that certain human desires have greater validity than, and must therefore prevail over, force or circumstances or mere being. The specific content of these desires, identified as rights, was given great effectiveness as propaganda by the alliance with nature. God was gradually replaced in the seventeenth and eighteenth centuries by the vaguer and perhaps more useful concept of nature. Natural rights acquired something of the prestige of physical, earthly existence, since one of the numerous connotations of nature is simply the external world. Thus the doctrine of natural rights could claim to be both a standard and a fact. Through the work of a long line of philosophers and jurists from the stoics to the scholastics, the law of nature had come to stand for the universal, the ordered, the "golden mean," as opposed to the particular, the accidental, the excessive, so often found in actual human life. Again, nature suggested also the extraordinary achievements of natural science; natural rights were felt to rest on the same basis as Newton's discoveries; and reason discerned these rights despite their daily violation, just as reason discerned the true movement of the earth despite its apparent immobility. In its early stages the doctrine also borrowed prestige from history. It was insisted that the specific rights claimed by Englishmen in their civil war as natural had been possessed by Englishmen since the Magna Carta and even earlier. When the doctrine passed over to France in the eighteenth century it lost this historical cast and came indeed violently to repudiate the past as a tissue of errors.

This setting aside of history subsequently scandalized many Englishmen, like Bentham,

who repudiated the phrase natural rights but erected a system of values almost identical with that of the French revolutionists. So too Maine fulminated against the metaphysics of natural rights, sought inductively in the facts of history and found there the famous phrase "from status to contract," a singularly pithy summary of the main tenet of the natural rights school. It is important to realize that natural rights were the metaphysical translation of a definite value scheme, or a way of life. Other metaphysical principles—history, utility, heredity according to Darwin and Weismann—were also used to explain, defend and propagate this way of life. But on the whole the natural rights basis has held on firmly, especially in the popular and the legal mind, right through the nineteenth century. The doctrine of natural rights in the eighteenth century commonly made use of a supplementary doctrine, that of the social contract. This latter doctrine provided a useful link with previously accepted notions and helped explain the genesis of natural rights on earth. It was therefore valuable as propaganda. But the social contract had no necessary connection with natural rights and was indeed invoked by Hobbes to deny them.

The main factor in the specific situation in which the doctrine of natural rights arose, and which serves to explain its contents if not its form, was the growth of a powerful middle class engaged in business for profit. The feudal nexus, in which each man possessed a definite status; in which ownership was hedged about by customary limitations, by collective supervision, by ethical and religious ideas; in which warrior and priest were the privileged persons, had by the seventeenth century been pretty well destroyed, especially in England. In its place there had arisen a handicraft system of industry, in which the distinction between employer and employee was already clear, a large trading class used to business enterprise rather than to actual production or even supervision of production and a new agriculture organized on a capitalistic basis. The "free" laborer and the "free" capitalist, both at liberty to enter into a variety of specific and usually short term contracts, existed before it was discovered that this sort of freedom was a natural right. The doctrine of natural rights was evolved by a prosperous middle class, first, as a rallying ground against the already almost beaten feudal warrior and priestly classes and, second, after the final victory over these classes, as an authoritative codification of the

desires of the victors, a projection of these desires into a kind of religious absolute. The doctrine of natural rights is therefore not a theory, not an attempted description or ordering of facts, but a faith, the essential dogmatic basis of what Carl Becker has called the "heavenly city" of the eighteenth century.

Innumerable political theorists of the seventeenth and eighteenth centuries contributed to the codification of the doctrine. Here it is possible to say but a word on the two who clearly contributed most to this process as well as to the no less important process of disseminating the doctrine. Locke summarized beautifully the achievements of the Revolution of 1688, emphasized the right of resistance to oppression, gave to his whole theory a pronounced individualistic cast and, what is most important, firmly incorporated among natural rights the right of private ownership of property, ethically justified, because the owner has "mixed his labor" with what he owns. Rousseau, although in a good deal of his work he apparently tried to push beyond the natural rights doctrine into political psychology, was none the less the leading propagandist of the doctrine in the crucial period of the American and French revolutions. He added little to its actual dogmas, but he did much to give it proselyting strength. His identification of virtue with feeling and ignorance, with the homely, simple life of the people; his bitter attack on the corrupting force of conventional taste, manners, intelligence, did much to bring middle class morality into a fruitful emotional union with natural rights. Briefly, Rousseau gave the doctrine of natural rights, hitherto endowed with the solid and effective but imaginatively limited prestige of nature as reality, as uniformity and as the "golden mean," the additional prestige of nature as mystic strength, as *magna mater*. This union of rationalism and mysticism gave the doctrine extraordinary explosive force during the French Revolution. Subsequently western European and American countries learned to control and enlist in the service of stability this mysticism of natural rights, much as the Catholic church controlled and used such mystic outbreaks as that of St. Francis.

Like all such doctrines that of natural rights, although it arose from the specific needs and ambitions of a group—the middle class—had to be popularized even in that class by organized effort; and of course among the lower classes a still more conscious propaganda had to be car-

ried out. In seventeenth century England religious groups and political parties were already well enough organized to serve this purpose. In eighteenth century France an extraordinarily complete system for teaching the people their rights was worked out—the system studied by Cochin under the name of *sociétés de pensée*. Once the middle classes were victorious, the governments could of course take up this task, especially in the schools, a process notably successful in France and in the United States. In continental Europe nineteenth century liberal groups, Masons, *Burschenschaften* and many others spread the doctrine of natural rights.

The chief codifications of these rights by formal political action are: the English Bill of Rights of 1689; the bills of rights attached to the American state constitutions, of which the earlier ones, like those of Virginia and Pennsylvania (1776), were of great importance as patterns; the French Declaration of the Rights of Man and the Citizen (1789); the first ten amendments to the Constitution of the United States (1791); the Declaration of Rights in the stillborn French constitution of 1793 (passed at the height of the social revolution, this declaration has certain almost collectivist elements, notably the right to public poor relief, a declaration of social solidarity and so on); the Declaration of Rights and Duties in the French constitution of 1795. The nineteenth century saw many similar bills of rights in almost all civilized countries, but these added little of importance.

The rights thus enumerated vary somewhat from document to document. Those in the French tradition commonly fail to include a right of association, while those in the Anglo-Saxon tradition are somewhat more tolerant toward group life within the state. Otherwise the rights enumerated may be briefly summarized as liberty, with liberty of worship, of speech, of the press, of public meeting singled out for special mention; equality, usually defined as equality before the law; property, which apparently needed no definition; a number of vague or pleonastic rights, like those of life, the pursuit of happiness, the *bonheur commun* in which the eighteenth century sought to incorporate its sentimental optimism; resistance to oppression. These rights were regarded, in Locke's terminology, as "inalienable": the individual could not surrender them, and the government could not infringe upon them. A right to labor is not enumerated. On the other hand, the right to life could be interpreted as giving

the individual at least an emergency claim on society for sustenance; and the right to property could, following Locke's own lead, be made to include a right to a reasonably free field for personal activity, for the sort of handicraft labor which Locke regarded as behind the creation of property.

When these rights were compared with the civil and criminal law actually enforced, even in the new regimes of Europe and America, certain discrepancies were clear. These discrepancies of course bothered only the extremely logical, who were very few, and the already discontented, who were not as numerous in 1800 as a century later. For the great majority of comfortable middle class people the gap between the bills and declarations of rights and actual law was of no more importance than the gap between the Sermon on the Mount and the routine of private Christian life. These discrepancies were roughly of two sorts. First, the enumerated rights were with difficulty reconcilable one with the other. They follow generally the antithesis between liberty and equality: if the laws let each man do as he wants to do, the very strong will ruin the very weak, and there is an end of equality; if the laws attempt to make each man as like his neighbor as possible, the eccentric will be suppressed, and there is an end of liberty. Second, enumerated rights may be more or less obviously violated in legislative enactments. A classic example of this is in the French constitution of 1791. The Declaration of Rights had asserted men to be born free and equal in respect of their rights; the constitution separated these free and equal men into "active" citizens who voted and "passive" citizens who did not, according to whether they paid a certain direct tax. The English combination laws of 1799 and 1800 or the American Alien and Sedition laws of 1798 can with difficulty be reconciled with the "inalienable" rights of the citizens of those countries.

Once consecrated as the metaphysical keystone of the social order produced by the victorious middle class, the rights of man acquired something of the fixity of religious dogma. But at almost the precise moment—roughly 1800, somewhat earlier for England, somewhat later for the rest of Europe and the United States—when the doctrine triumphed finally, the way of life from which its values had been built up was yielding to another way of life. The handicraft system was superseded by the factory system, and ownership was coming to be absentee

ownership, to be so far remote from any connection with labor that even the economists deserted Locke and explained interest on capital as the reward of abstinence. Yet throughout the nineteenth century and into the twentieth, in the industrial countries, the doctrine of natural rights was used to defend a kind of property which in its extension, in its concentration in relatively few hands, in its very nature, was totally different from the property with which Locke and his followers were familiar. In general terms, a set of ideas with which one class had appealed to the ethical sense of humanity to secure its triumph at the expense of another class had now crystallized into a set of dogmas with which the newly victorious class consolidated its gains at the expense of a third class. Thanks to the marvelous power of the machine, however, and perhaps also to the development of the typical credit mechanism of capitalism, this triumphant class really gained far more than could have seemed possible in 1800. At the same time the gap between the new conditions and the old dogmas became increasingly obvious to all but the very interested or the very faithful. Some such general process as that outlined above—by which the liberal ideas with which a class fights its way into power become the authoritative dogmas by which it holds power—has often occurred in history. But the striking thing about this particular instance was the rapidity with which the doctrine of natural rights, become a dogma, was challenged by a new set of ideas, which were also provided with an ethical setting and used by a class struggling for power. Marxist socialist thought repudiates the rights of man and especially the right to property. Independent economists like Veblen have pointed out that men brought up with machines—the engineers and skilled machinists as well as the factory workmen—must now live a life so different from the life of the eighteenth century that they cannot even understand the doctrine of natural rights.

Yet the doctrine is still very much with us. Especially in the United States it has been used by the highest courts to protect private ownership against public regulation. The Fourteenth Amendment, notably, has been used to invalidate state legislation incorporating restrictions on private enterprise in the interests of the community. The concept of property as an inalienable right has allowed the courts to pass in judicial review acts of administrative bodies regulating public utilities. The general interest

seems to be able to proceed against private property only under the guise of a "police power." Perhaps it is an even more important fact that the ideology of natural rights has thoroughly penetrated into the literature, the arts, the educational systems of western peoples. It may be true that this ideology is utterly inappropriate to the machine age; it may even be true that its patent failure to correspond with real conditions prevents those conditions from being as satisfactory for human existence as they might be. It is certainly true that the logical implications of nineteenth century scientific materialism leave no room for the concept of right. But the doctrine of natural rights is not wholly logical, and that aspect of the doctrine concerned with individual property rights and with individual freedom to experiment was actually greatly bolstered by the biological determinism of Darwin and his immediate successors. The doctrine of natural rights is so solidly rooted in human experience, its prestige so heightened by the extraordinary expansion of the western world in the last century, that, like Christianity, it will probably have to be absorbed, rather than destroyed, by a new ideology.

CRANE BRINTON

See: NATURAL LAW; BILLS OF RIGHTS; DECLARATION OF THE RIGHTS OF MAN AND THE CITIZEN; DECLARATION OF INDEPENDENCE; CIVIL RIGHTS; CIVIL LIBERTIES; SOCIAL CONTRACT; LIBERTY; EQUALITY; DEMOCRACY; INDIVIDUALISM; LIBERALISM; ENLIGHTENMENT; RATIONALISM; FRENCH REVOLUTION; PROPERTY; CAPITALISM.

Consult: Gooch, G. P., *English Democratic Ideas in the Seventeenth Century* (2nd ed. Cambridge, Eng. 1927); Martin, Kingsley, *French Liberal Thought in the Eighteenth Century* (London 1929); Wright, Benjamin Fletcher, *American Interpretations of Natural Law* (Cambridge, Mass. 1931); Ritchie, D. G., *Natural Rights* (3rd ed. London 1916); Scherger, G. L., *The Evolution of Modern Liberty* (New York 1904); Becker, C. L., *The Heavenly City of the Eighteenth Century Philosophers* (New Haven 1932); Larkin, W. Paschal, *Property in the Eighteenth Century with Special Reference to England and Locke* (Dublin 1930); Pareto, V., *Trattato di sociologia generale*, 3 vols. (2nd ed. Florence 1923) vol. i, sects. 401-63; Veblen, T. B., *The Theory of Business Enterprise* (New York 1904) chs. iv and viii, and *Absentee Ownership* (New York 1923) chs. iii-iv; Hamilton, W. H., "Property—According to Locke" in *Yale Law Journal*, vol. xli (1931-32) 864-80.

NATURALISM is better called a point of view than a fixed doctrine or a particular set of dogmas; for the doctrines and the dogmas, varied and often contradictory, that have reasonably been identified as naturalism have depended

largely on the context in which they arose and the interests, moral, social or aesthetic, in whose service they were emphasized. In the broadest sense the term may be used to describe that type of secular thought, first historically formulated in ancient Greece, which tried to frame a theory of the universe, a cosmology which both should comprehend a unity of substance or of principle and in terms of that substance, principle or set of substances or principles should comprehend or explain the changes that appear to occur in the universe. Such a theory, first clearly and simply expounded by Democritus and the Greek atomists and taken over almost without modification by Lucretius in the first century B.C. in Rome, originated in the attempt to render the flux and superficial confusion and caprice of experience intelligible; it represented the first classic venture of thought to think through to some intelligible order in experience free from and, as in the case of Lucretius, in direct opposition to the presumptions of theology and myth.

The generic characteristic of all theories of naturalism, whatever be the detailed version of nature that any one of them gives, is the assumption or the attempted demonstration that there is an order; that the appearances and disappearances of objects and the movements of events do constitute a system, the terms of which need not be referred to anything beyond that system or order itself. By virtue of its insistence on the self-sufficiency of nature naturalism sets itself in opposition to "supernaturalism," which it regards as a contradictory notion doubling the natural universe with a ghostlike and capricious imitation of this same universe. Naturalism seeks the explanation of the universe in some form of elements, in some regularity of motion: the regularity not dependent on any prevision or intention of a being beyond the system; the elements, particles or substances being something given, something ultimate and unpredictable. The regularities are what they are, the elements likewise. They are referred to no explanation beyond themselves and they constitute all the explanation that may be given of any object or event. The assumed regularity removes caprice and isolation from objects or events. The objects cohere and events connect in a system. The assumed ultimate elements change the world from an apparent phantasmagoria, from an evanescence of appearances, to a permanence of ultimate elements whose combinations and permutations constitute at once the being and

the explanation of apparent and changing things. Such a conception of the universe yielded to the imagination of the Greek atomists and to Lucretius, as they yield to anyone who accepts it, numerous satisfactions not necessarily allied to one another. The cosmos becomes a cosmos, not a chaos. Unity is established amid variety, permanence amid change, an enduring and intelligible reality amid diverse and bewildering appearances. Order and recurrence are accounted for without resort to providential purpose or casual miracle. The universe becomes intelligible rather than puzzling, and out of the mist of appearances a daylight world of mechanism arises.

In ancient Greece naturalism took the form of a clear and simply formulated materialism. The ultimate elements were atoms, neutral and homogeneous in character; their motions were regular and in that sense absolute. The so-called billiard balls physics of the nineteenth century is a revival of that Greek type of naturalism which expresses itself in the form of materialism and mechanism—materialism from the point of view of the elements of which it is composed, mechanism from the point of view of the principles of its operation. But while materialistic mechanism is the most characteristic and familiar form of naturalism, it is only one form of it. Philosophic naturalism is not dependent on one theory of physics. The identification in many educated minds and in the popular imagination is largely due to the fact that Newtonian science and Cartesian philosophy managed to make a mathematical, mechanical, materialistic formulation so effective a principle of explanation and so effective a tool of intellectual and ultimately of practical control. But naturalism as a cosmology does not depend on its alliance to any particular formulation in simple materialism or in modern mathematical physics. If anything, it is more dependent on mechanism, or the assumption of some consecutive and regular order among events and regularity of conditions among objects, than on the assumption of any kind of stuff or palpable material. It is fundamentally a cosmology of a regular order, which order is identified with or as nature. From this point of view Spinoza is as much a naturalist as Democritus or Lucretius.

The conception of a necessity in the relations of things flowing from an ultimate uncaused cause, like any other naturalistic theme, excludes deliberate purpose or casual and interruptive miracle. On the other hand, the very regularity

of a mechanical scheme may be regarded (as by the deists) as both expressing divine reason and being intelligible to human reason. All materialistic systems of philosophy have naturalism as their matrix, but not all naturalisms are materialistic. Thus in the eighteenth century Baron von Holbach with his *Le système de la nature* and Lamettrie with his *L'homme machine* tried to extend the mechanistic hypothesis to the realm of biology and psychical or mental life as well as to the observable phenomena of the physical world. In the present age the attempt of behaviorists to reduce all explanations of conduct to elements ultimately material in their nature and mechanical in their relations is a modern version of the enterprise of mechanisms applied to all phenomena, including those less obviously or less easily reducible to mechanical and material terms. But once naturalism attempts to deal with life in a biological and in a psychical sense, it has to deal with problems which call for something other than the simple categories of a mechanistic materialism. Life is a process dynamic, creative and degenerative in character. The production and the presence of genuine novelty in the processes of life, the fact of creation or of creative adaptation and purpose, once it is included in the picture and in the analysis of nature, force naturalism to become less obviously, less crudely and less geometrically materialistic in character. Indeed the newer physics itself, with its resolving of matter into process and into the relations among "events," and the tendency among philosophical physicists to treat the physical universe in organic terms have introduced into naturalism categories that clearly demarcate it from materialism as to elements, from mechanism as to operation.

There are indeed certain types of naturalism that are even able to absorb idealistic elements, and there is nothing about philosophic naturalism that must of logical necessity exclude factors and categories and interests which often in the past have been set over by traditional materialists as mere appearance against the alleged reality of matter. Matter conceived dynamically is the locus and matrix of all objects, experiences, ideas and even ideals. A purely static mechanistic materialism excludes anything remotely resembling purposes, ends, fruitions. A dynamic naturalism that conceives of primary substance as in flux (Aristotle is a classic ancient and George Santayana a distinguished modern instance) thinks of nature not as moving accord-

ing to prescribed ends laid down in advance but as coursing to ends immanent in those movements; it considers ideals and fulfils the fruitions of natural processes. The acorn grows into an oak, the boy into a man, the bud into a flower, the tongue functions as speech, and the body realizes itself in the entelechy of the soul. Consciousness is a natural function of bodily life and flowers into dreams, ideals and purposes. There is no contradiction between the body and the spirit; the latter is the realization of the possibilities of the former. Art, religion, thought and imagination are functions of nature just as much as are breathing and digestion. "All ideals have a natural basis and all natural processes an ideal possibility or career." The opposition sometimes alleged to exist between the natural and the ideal depends usually on a restricted conception of nature in narrowly mechanical terms. Ideals in a dynamic naturalism are as natural as flowers or fruit, to which with reference to their conditions and origins in primary substance they may be very exactly compared.

While naturalism as thus far treated is largely a cosmology, the term nature and the term naturalistic have been used in somewhat different contexts. In ancient stoicism, especially in its Greek rather than its Roman formulators, nature was a name for a reasonable, or normative, order in the universe, which was not only a realm of being but a standard of action. The order of nature provided the basis for law and morals, and we owe to the stoic identification of nature and reason the notion of natural law (*q.v.*) and of a standard of goodness or virtue to be found by reference to the total order in the universe. In the eighteenth century, especially in Rousseau, nature came to be a normative term not so much in the sense of identification with reason as in the sense of identification with the alleged "nature of man" as uncorrupted by the arts and sciences of civilization. The natural man in Rousseau was set over against the artificial man of civilization, the goodness of natural man over against the corruption of the man perverted by civilization. In such a context nature is contrasted not with supernature but with art. All contrivance is a modification of or an interference with nature and all institutions, arts, crafts and sciences are "artificial." In morals this has led, as it led in Rousseau, to an assertion of the spontaneous as over against the merely customary and conventional; in the fine arts to an assertion of the "simple, passionate, sensuous" as over against

the complex, formal and intellectual. Late in the nineteenth century naturalism in aesthetic theory came to be used for a time as identical with "realism," especially in literature, the emphasis laid on the brutally real, "the facts of life," as over against fantasies, prettifications and escapes. In ancient Greece at least naturalism was not incompatible with classicism, in the sense of a disciplined and harmonious representation of existence in art—nature seen with a disciplined eye and rendered with a controlled hand.

Broadly speaking, in the modern period, whatever be the special technical formulations of differing naturalistic philosophies, they agree on the whole in a general belief in scientific realism, in the utilization of the broad principles of physics and biology for explaining the universe, without any very critical examination of the underlying metaphysical assumptions of the sciences themselves or any very close examination of the categories involved in the special sciences or the methodology of science in general. Naturalism, like any other general cosmological point of view, has had certain important moral consequences and imaginative results. With respect to morals it has pointed to the relativity of moral standards and aimed to treat morals not as the manifestation of categorical imperatives but as the relative expressions of life and of associated ways of life under given conditions and as the reflection of given environments. In religion it has pointed toward either out and out atheism or at the very least agnosticism. But from the point of view of a naturalism not too mechanistically conceived (and it is at the present time being less and less so conceived) the spiritual life is itself a natural fact and deity, as the expression of the synthesis of possible perfections, is not incompatible with a naturalistic outlook in morals and metaphysics.

IRWIN EDMAN

See: PHILOSOPHY; MECHANISM AND VITALISM; NATURAL LAW; RATIONALISM; IDEALISM; SCIENCE; EVOLUTION.

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NATURALIZATION denotes both the act of admitting an alien to the position and privileges of a native born citizen and the process of being so admitted. It has a governmental aspect in that it is usually considered an act of grace on the part of the sovereign; but it has also a personal aspect, for occasionally it is regarded as a natural right of man. In modern times it has generally been a right established by the sovereign, its exercise depending upon the fulfilment of certain conditions. The concept of a naturalized citizen acquired its present legal connotation during the reign of Elizabeth, when there existed only natural subjects of the crown. Their relation to the crown was interpreted in quasi-feudal terms, through the requirement of an oath of allegiance. The importance of land tenure in the feudal order was long reflected in the inability of an alien to acquire real property, and the importance of the personal element in his inability to inherit; the desire for naturalization was greatly enhanced by the obvious economic advantages of escaping from these restrictions. In time, particularly after the American colonies had become an independent republic, the individual citizen as the constituent element of the modern national state took the place of the subject bound by allegiance to his natural lord. Accordingly naturalization has come to designate the process by which an individual becomes the citizen of another country or, to broaden the concept still further, that by which an individual becomes a member of another citizenry. Only in the latter sense can the term naturalization be applied to the city-states of classical antiquity and mediaeval Europe or to Soviet Russia.

The concept of naturalization like all other concepts of public law is molded by the prevailing idea of the state and government. There are vestiges of very ancient tribal conditions in the earliest forms of naturalization in Rome. Essentially a person could become a citizen only by becoming a member of one of the patrician families (*gentes*). This was possible primarily through adoption, or *adrogatio*, the latter alone presupposing the consent of the public author-

tation rather than political action; attacked the constitution as a defense for slavery, urging disunion if necessary; opposed Negro colonization in Africa; and excoriated the ministry for justifying slavery by Scriptural quotations. Unlike Garrison he opposed the reelection of Lincoln. After the Civil War he insisted, successfully despite Garrison's opposition, that the Anti-Slavery Society continue its agitation until suffrage was granted to the Negro. He succeeded Garrison as president of the society, which was finally dissolved after the passage of the Fifteenth Amendment.

Phillips was one of the few prominent abolitionists who transferred their ideas of freedom to the support of the labor movement. In 1870 he was the candidate for governor of Massachusetts on the newly formed Labor party ticket. At one time or another he also supported such unpopular causes as woman's suffrage, nihilism, independence for Ireland and the abolition of capital punishment.

MCALISTER COLEMAN

Works: Speeches, Lectures and Letters, 2 vols. (Boston 1863-92). Phillips' writings appeared in the *Liberator* and *Antislavery Standard*.

Consult: United States, Library of Congress, Wendell Phillips (1811-1884), Select List of References, no. 1206 (1931); Austin, G. L., *The Life and Times of Wendell Phillips* (new ed. Boston 1888); Sears, Lorenzo, *Wendell Phillips: Orator and Agitator* (New York 1909); Russell, C. E., *Wendell Phillips: Soldier of the Common Good* (Chicago 1914).

PHILO JUDAEUS (c. 30 B.C.-c. 45 A.D.), Jewish philosopher and theologian. A member of a distinguished family and the brother of the alabarch, the head of the Alexandrian Jewish community, Philo lived in Alexandria, his native city. In the year 40 he visited Rome with a Jewish mission to Caligula. In his numerous writings, composed in Greek, he set himself the task of amalgamating the spirit of Judaism or Mosaism with that of Greek philosophy. Indeed he regarded the laws of Moses as a philosophy, the only true one, and endeavored to show that the best thought of the Greek philosophers was in agreement with it. To this end he employed the so-called allegorical method of interpreting the Scriptures. On the Greek side he was influenced chiefly by Plato, Aristotle and the stoics, all of whom he used eclectically.

Philo's main contribution to philosophy and theology is his doctrine of the Logos, which reflects Heraclitean, Platonic and stoic influences. Maintaining the extreme transcendence of God, Philo found it impossible to con-

ceive of God as coming directly in contact with matter, which in its pure and lowest form is the essence of passivity. Hence he looked upon the physical world as the product not directly of God, but indirectly of certain intermediate powers emanating from Him. The Logos is the principal one of these powers. It is the universal reason, in which man's reason participates. The lower parts of the human soul, the senses and the passions, are like the body tainted by matter and hence inferior in their nature. The aim of human existence therefore is to live as little as possible the life of the body, the senses and the passions and as much as possible that of the mind or reason; in other words, man should endeavor to be as like unto God as is permitted to a creature.

Virtue is the path to this ideal, and among the virtues justice occupies an important place. Philo defines justice in Platonic fashion as the harmony of the other three cardinal virtues, wisdom, courage and temperance, and like Aristotle and the stoics as that which gives to everyone his due. His definition of law is stoic also. To follow reason and imitate God is to keep God's law, for "Law is nothing else but divine reason (*Logos*), enjoining what is right and forbidding what is wrong."

The Logos of Philo has an interesting history, since except for the prologue to the *Gospel of John*, which may or may not be influenced by Philo, it was hypostatized, or personified, by the early patristic writers and identified with Christ, the second person in the Trinity, representing divine wisdom. This idea was adopted by the scholastics, from John Scotus Erigena through Anselm and Abélard to Thomas Aquinas, and even by later philosophers.

ISAAC HUSIK

Works: Opera quae supersunt, ed. by Leopold Cohn and Paul Wendland, 7 vols. (Berlin 1896-1930); *Works*, tr. by C. D. Yonge, 4 vols. (London 1854-55), and translation by F. H. Colson and G. H. Whitaker, Loeb Classical Library, vols. i-iv (London 1929-32).

Consult: Drummond, James, Philo Judaeus, 2 vols. (London 1888); Arnim, Hans von, *Quellenstudien zu Philo von Alexandria*, Philologische Untersuchungen, vol. xi (Berlin 1888); Martin, Jules, *Philon* (Paris 1907); Bentwich, N. D., *Philo-Judaeus* (Philadelphia 1910); Geiger, Franz, *Philon von Alexandria als sozialer Denker*, Tübinger Beiträge zur Altertumswissenschaft, vol. xiv (Stuttgart 1932).

PHILOSOPHY. Definitions of philosophy are usually made from the standpoint of some system of philosophy and reflect its special point of view. For the purposes of this account the

difficulty may be avoided by defining philosophy from the point of view of its historical role within human culture. Since the survey is confined to western civilization, the origin of European philosophy in Greece supplies the natural beginning. For not only does the name "philosophy" come from Greek thought, but also the explicit consciousness of what is denoted by the term. Greek thinkers moreover distinguished the branches into which philosophy is still conventionally divided; they laid the foundations of logic, cosmology, metaphysics, ethical and political philosophy, and to a lesser degree, aesthetic theory. Even if these foundations are not always built upon, it is impossible to understand departures and innovations apart from some reference to Greek thought. In Greek philosophy the problems of western philosophy are either formulated or adumbrated.

The reason for the primacy of Greek thought is not accidental, nor is it for the most part a mere matter of chronological priority. On the contrary, the reason for it is an essential part of a definition of philosophy from the cultural point of view. For Greece was a ground for exhibiting and proving most of the difficulties and predicaments that arise in the collective relation of man to nature and fellow man. This condition would not of itself have generated philosophy without the extraordinary capacity of the Greek mind for observation and statement. An explanation of this fact would here be irrelevant and perhaps impossible. Such is not the case, however, with respect to the traits of Greek culture that called forth the reflections that initiated western philosophy: these exhibit in striking fashion the typical conflicts of collective human experience. Consequently, in spite of the limitations of the Greek world in space and time, Greek traits form the very stuff out of which philosophy is made. Greece, and especially Athens, was an intellectual looking glass in which the western world became conscious of its essential problems. The Greek origins of the European philosophical tradition dispose completely of the notion that philosophical problems evolve in the consciousness of lonely though brilliant thinkers. These origins prove that such problems are formulations of complications existing in the material of collective experience, provided that experience is sufficiently free, exposed to change and subjected to attempts at deliberate control to present in typical form the basic difficulties with which human thought has to reckon.

Greece was distinguished from other ancient civilizations in that priests lacked political authority, having indeed become subordinate civic officers. Equally important was the fact that religious beliefs were early set forth in literature of great artistic merit, never in the form of dogmas. The resulting intellectual freedom furnished the primary condition for the production of philosophy. The cosmogonies that characterized Greek mythology in common with all other religions were emancipated with comparative ease from a predominant religious setting and were transformed into reasoned attempts at a rational account of the origin and constitution of the known world. The early thinkers in the Grecian colonies in Asia Minor and Italy and its islands were geographers, astronomers, geologists, meteorologists, founders of the natural sciences quite as much as they were philosophers. Their generalized and comprehensive stories of the cosmos and its origin created an idea of completeness and breadth of view that remained as part of philosophy after the sciences had become specialized. The physical interest of these early thinkers persists today in that branch of philosophy called cosmology.

It was probably natural that interest in physical nature should have predominated in the adventurous, seafaring, trading Greek colonists, especially as their political life was borrowed. In Athens, however, cosmology was definitely subordinated to moral and political interests. Throughout Greece generally, with the exception of Sparta, civic matters were adjusted through the medium of discussion. Athens was moreover a pure democracy in that all citizens rather than a delegated body took part in public affairs. Party conflict was rife and changes in type of government were frequent. The situation was expressed, on the intellectual side, in consciousness of a number of problems defined in terms of antitheses. There were, for example, the problems of stability versus change, of harmony and order versus conflict, of reason (represented by discussion and consultation with a view to persuasion) versus force. Intermingled with these were other questions brought to the fore by the traveling scholars called sophists. Although, chiefly owing to the attacks made upon them by Plato, the term sophist has now a distinctly derogatory significance, the sophists were only the learned men of the day who traveled about offering their intellectual wares for sale—and with the Greeks all important education was adult education. Disputes regarding

the role assumed by these men evoked such further antitheses as tradition versus innovation, the relations between custom and conscious thought, between nature and culture, between nature and art—since the sophists professed to teach all of the arts that were in good repute; that is, those above the level of the manual craftsman, such as the military art and the art of managing the household and the city-state.

Socrates, the initiator of Athenian philosophic reflection, deliberately strove to limit theoretical discussion to moral and political subjects. Apparently the direct stimulus to his conversations on these topics came from the sophists. His primary question was whether the various forms of social excellence, the "virtues," which command recognition by others, can be taught and if so how. Consideration of this theme led him to consideration of the relation of the various virtues to one another and to their unity in understanding, or rational insight. Since rational insight was found by him to be practically non-existent among politicians, among the poets, who were the acknowledged moral teachers of the community, as well as among the sophists, his teaching came to its climax in a demand for the pursuit of understanding or wisdom.

The philosophical tradition of the western world did not originate because of a mere taste for abstract speculation or yet because of pure interest in knowledge divorced from application to conduct. On the contrary, wisdom, in its material and goal, was something more than science even though it was not possible without science. It was science enlisted in the service of conduct, first communal, or civic, and then personal. Most of the distinctive traits of philosophy through the ages are intimately connected with this fact. The connection is not external or due to the accident of its origin in Greece, but is intrinsic. The Greeks brought to consciousness three problems that are bound to emerge whenever civilization becomes reflectively turned back upon itself: What are the place and role of knowledge and reason in the conduct of life? What are the constitution and structure of knowledge and reason by virtue of which they can perform the assigned function? And, growing out of this question, what is the constitution of nature, of the universe, which renders possible and guarantees the conceptions of knowledge and of good that are reached? Upon the whole, in course of time, philosophy began with the last question, and this fact often disguises the initial problem as to the guidance of life and

conduct. But the tie that unites the seemingly most remote speculations with this issue has never been completely cut.

The problem of the organization and direction of personal and community conduct was still uppermost with Plato, although he took steps which led to an apparent relegation of that issue to a secondary position, a fact that has frequently caused his modern interpreters to place him in a perspective foreign to his own intent. Instead of excluding or neglecting speculations about the constitution of nature in formulating the end of the organized state and individual, he asserted that the problem of the end and of good can be solved only when the inquiry is extended to include the totality of things and when the final conclusion is reached by understanding the constitution of nature. This latter problem moreover can be solved only as the problem of the structure and method of knowledge is solved. Thus the ethico-political problem was widened to include cosmology and logic. Dialectic became central, not merely auxiliary, in the philosophic scheme, for it was the means by which insight into the good was to be attained. By reason of the place of the good in the structure of the universe this fact instituted a necessary connection between logic and metaphysics.

Because of the inherent relation set up by Plato between cosmology, science (especially mathematics), logic and political ethics, his fundamental distinctions, such as those between being and becoming, reality and appearance, form and matter, whole and part or universal and particular, were not presented by him as detached intellectual distinctions. While he defines philosophy as desiderated science of the whole, he defines it also as the legislative science, or science of the state, since social organization is the form in which man is most directly concerned with the whole.

The distinction of reality and appearance has an ethical import as well as one running through knowledge—where it appears in connection with the distinction between science and mere opinion—and through metaphysics. Morally it involves the question of the individual in his relations to others, since evil never offers itself as such but disguises itself as a good: the bad man strives to *seem* good in order to obtain recognition, while the truly good man is content to *be*, without regard to appearance, that is, the impression made on others. Starting from this ethical distinction, Plato was able to follow the

difference and relation of the two throughout a series of logical and cosmological terms, such as one and many, permanent and changing and so on. Being with Plato always has the connotation of the stable, the dependable, while change imports instability and variation—departure from a standard which is fixed. In a similar way his distinction of universal and particular is not merely logical or merely metaphysical, but is concerned with the relation of law—which is legislative and normative—to application to the individual in judicial decision and administration. Such points are arbitrarily selected examples of the interpenetration of the politico-moral with the logical and metaphysical, which is evidenced on a larger scale in his most systematic work, the *Republic*, since this is at once a treatise on metaphysics, theory of knowledge, politics and education.

It is evident that the interpenetration which, in the case of Plato, gave meaning to philosophy as the search for wisdom could not long be maintained in the form in which he set it forth. Philosophy was in a condition of unstable equilibrium with respect to the various factors contained in it. To Plato it seemed still possible, at least as an intellectual and moral aspiration, to reform and preserve the city-state. The fact that Aristotle was a tutor of Alexander the Great indicates that the failure of this dream was imminent and consequently a redistribution of the constituents of the whole inevitable. The direction it took, especially in the subordination of morals and politics to metaphysics and science and of practise in general to theory defined as contemplative cognitive possession and enjoyment of being, was connected with Aristotle's own naturalistic interests. It thus happened that while he could retain and utilize most of the leading distinctions of Plato, he gave philosophy as a whole a radically different turn and form. While to Plato the apprehension of real being was not complete until the insight was reembodyed in control of phenomena through the appropriate organization of the latter, to Aristotle science was its own end, and everything in the sphere of action dealing with persons and things was relegated to an inferior order of probability and opinion. The separation thus effected by Aristotle enabled him to distinguish, define, and classify in a way not open to Plato, since the latter's problem was to institute actual connection between matters assigned by Aristotle to different classes or realms. The outcome was a marvel of systematization which much

later, at the height of scholasticism, became the model for the summing up and organization of knowledge from the standpoint of the prevailing theologies, Jewish and Christian.

Subsequent to the dissolution of Greece, during the time of the supremacy of Rome in politics, of Alexandria and oriental beliefs in religion, the values assigned by Aristotle became as unreal to his successors as the Platonic social aspirations had been to Aristotle. During the period which Gilbert Murray describes as "failure of nerve," the chief interest of thinkers was in the supernatural. There ensued of necessity a period of acute metaphysical speculation with all phenomena arranged and interpreted in hierarchical descent from supreme being, a reality unattainable by way of scientific thought but capable of being at least occasionally grasped in mystic intuition. Thus neo-Platonism effected a further distinctive redistribution of the constituents of philosophic reflection, because of a new center of dominant value. Thinkers in Rome, more removed from oriental influence, translated philosophy into a practical direction of conduct, a tendency common to stoic, Epicurean and skeptic schools. The domination of western European life by the Roman church introduced another factor, and from the time of St. Augustine through the twelfth century there was a systematic distribution of metaphysical, logical, cosmological and ethical factors worked out on the basis of the supremacy of the values characteristic of religious faith.

The purpose of the foregoing is not to sketch, even in outline, the history of philosophic thought, but to suggest the features that have always been characteristic of philosophy, and to indicate that cultural causes have produced the main changes in the direction and content of philosophic systems. If the movement of modern philosophy were followed, its tendencies would be seen to be connected with the new values that emerged with the revival of scholarship in the Renaissance, and especially with the growth of the natural sciences and the secularization of interest that mark recent centuries. Such a historical survey shows the necessity of defining philosophy from the standpoint of value, since the changes of philosophy are all inherently bound up with problems that arise when new emphases and new redistributions in the significance of values take place. For example, it is as certain as anything can be that if science, at present a dominant interest, were to become subordinated to some value that may

emerge in the future, there will be produced a new set of problems and hence of philosophies.

The connection of philosophies and of change in the aim and method of philosophizing with changes in culture and social organization, which bring about redistributions of collective valuations and prestige, makes it possible to explain the fact that each system has a definition of philosophy couched in its own terms. For each philosophy is in effect, if not in avowed intent, an interpretation of man and nature on the basis of some program of comprehensive aims and policies. The generality and comprehensiveness claimed for philosophy have their origin in this fact. Each system has of necessity an exclusive aspect, often expressing itself in a controversial way, because it is, implicitly, a recommendation of certain types of value as normative in the direction of human conduct.

This intimate connection of philosophy with the values that interpret existence and direct conduct explains certain matters related to it. Philosophy has always, for example, been associated with religion either by way of derivation and justification or by way of criticism, and religious beliefs evidently claim to be concerned with ultimate values while religious attitudes claim to be supreme in conduct. But since philosophy must formulate its conceptions and interpretations in rational form, each philosophy depends necessarily upon the intellectual currents and the best authenticated knowledge of its time—in other words, upon science. As a consequence of its relation to religion and morals on one side and to science on the other, philosophy occupies a peculiar position with respect to literature. While philosophies have not as a rule been presented in an especially satisfactory form, they have aimed at appeal and persuasion more general and more moving than those of the specialized sciences. They have striven to bring about adoption of certain basic attitudes, not merely to convey information.

Finally, philosophy has a close connection, in some cases direct and in others indirect, with matters of conduct. The connection is direct when those studying or accepting a given philosophy are thereby committed to a certain way of life, including personal discipline. This was the case, for example, with the Pythagoreans, cynics and stoics, and Epicureans. A trace of the idea remains in the popular notion (derived from stoicism) that a philosopher should be able to endure pain and the vicissitudes of life better than others. The indirect connection is illus-

trated in what has been said about the socio-ethical setting of philosophy in the case of Socrates and Plato. It is exemplified also with the scholastics, with Spinoza and John Locke, with the materialistically inclined *philosophes* of the eighteenth century, with Rousseau, Karl Marx, John Stuart Mill, Herbert Spencer and most great names in the history of thought. In spite of Aristotle's deviation from Plato, concern with the good, with value, is characteristic of the Stagirite thinker as well. For he asserts that the life of *theoria* is higher than that of *praxis*, so much higher that it defines the being and activity of God. Distinctions of higher and lower are found indeed throughout all his professedly purely cognitive distinctions and classifications. The philosophies that most emphasize scientific form and content also set forth a conception of the value of science.

It is a generic definition of philosophy to say that it is concerned with problems of being and occurrence from the standpoint of value, rather than from that of mere existence. There are of course various and varying types of philosophy that claim to connect philosophy directly and exclusively with science. Some of them regard philosophy as the ultimate science, holding that it deals with reality as a totality or as perfect being, in contrast with the special sciences, which deal with it piecemeal or with mere phenomena. Others hold that it is concerned with effecting a comprehensive synthesis of the results of the special sciences. Still others assert that it is concerned with analysis of the unexamined concepts and postulates that lie at the base of the special sciences. It would not be just to say that the conflict of these views with one another throws out of court any view that connects philosophy exclusively with science. But upon examination it will be found that the cause of the divergence of views resides in some difference of valuation or else that the theory of science is itself enclosed in a tacit context of valuation.

The connection of philosophy with conflicts of ends and values serves to explain two criticisms frequently brought against the enterprise of philosophy. One of them points to the diverging and controversial character of philosophy in contrast with the definite trend toward unity in the sciences. If, however, valuation enters into philosophy, divergence is inevitable. It could not be eliminated except by attainment of a complete consensus as to universal ends and methods. If those who hold up different values

as the directive aims of life were to agree with one another in their interpretations of existence, it would be a sure sign of insincerity. Relativists and absolutists, radicals and conservatives, spiritualists and materialists, differ primarily in their systems of value, and their strictly intellectual differences follow logically. How can those who believe in the necessity of a transcendent source of authority agree with those who believe that the seat of authority is and should be in the processes and operations of actual experience? In spite of conflicts philosophy serves the purpose of clarifying the source of opposition and the problems attendant upon it; while with respect to some problems articulation and clarification are more significant than formal solution.

The other indictment of philosophy, that it mills around among the same problems without settling any of them, may be met, on the basis of the relation of philosophy to value, by pointing out that no phase of culture can settle the problems that arise in and for another phase of culture. General problems regarding aims and the means appropriate to their realization arise in every type of social life. They have formal features in common, and these are stated in philosophical generalizations. But in actual content they differ, and hence they have to be dealt with in the terms both of the science and of the dominant practical tendencies of each period. Only if social institutions and the culture attending them were wholly static would it be possible to carry over completely the solutions or even the methods of one epoch into the conditions of another.

A striking illustration of the formal constancy of certain problems along with tremendous change in content is found in the question of the relation between the individual and the universal. Conflicts between the individual and the total order of which he is a part are bound to arise in every complex and changing culture. Wherever reflection is free and energetic, these conflicts will be generalized and will take conceptual form as the problem of the relation of universal and particular. In this conceptual form they will have a certain independent dialectical career of their own. But the state of knowledge and the state of institutions are the variables of the formal relationship, and they will inevitably color the meaning of the problem. One has only, for example, to contrast Greek, mediaeval and contemporary culture with respect to the knowledge of nature bearing upon this problem and with respect to the political and economic

conditions that determine the actual status of individuals, to see how constancy of the problem in formal terms is compatible with great variability in content, so that the issue must be approached from a new point of view, never repeated in subsequent history.

The same considerations explain the diversity of solutions propounded. For difference of valuation signifies difference of interest, of emphasis and hence of weight and perspective. For example, one who at the present time gives primary weight to the findings of the physical sciences will still have at least two opposite courses open to him. From one point of view he will see how careless nature is of the conservation and development of complex highly organized individuals, and will rate low the place of individuality in the scheme of things. On the other hand, he may be impressed by the breakdown of the Newtonian philosophy of ultimate atoms, inherently all alike and differing from one another only in external matters, such as spatial position and rate of motion, and by the tendency to regard all laws as statistical norms not exactly applicable to any individual particle, and hence will infer that unique individuality is rooted in the very nature of things. And one who approaches the problem from the side of material organized biologically and socially has open to him also a choice in valuations. He may esteem development as higher than order and identify individuality with the principle of progress. Or he may be troubled by disorder and disturbance and thus be led to subordination of individuality to the whole on the ground that individuality by itself leads to anarchy and chaos. There will be other times in which a fair equilibrium of the two principles will obtain and this particular problem will temporarily sink into the background, some other widely felt predicament directing attention and interest to the need of conceptual formalization of another conflict.

The conception of philosophy that results from the account just presented is in fundamental contrast to that view of philosophy which regards it as an ultimate science disclosing the intrinsic nature of reality as distinguished from the special sciences, physical and social, which reveal only phenomenal manifestations. Even, however, if the latter view is held, it must be admitted that it can apply literally only to some one of the diverse systems characterizing the history of thought, and that other systems have to be accounted for, if at all, in cultural terms.

Presumably also one may find in the contemporary state of culture at least the causes for the emergence of the particular view of reality assumed to be correct.

In other words, whatever else philosophies are or are not, they are at least significant cultural phenomena and demand treatment from that point of view. When philosophy is so approached, a highly important role must be given to any intellectual effort which seizes upon the characteristic disturbances and needs manifested in a particular culture (including of course its scientific resources as well as its institutions) and which formulates them in the most generalized terms the epoch has at its command. The conception of philosophy reached from a cultural point of view may be summed up by a definition of philosophy as a critique of basic and widely shared beliefs. For belief, as distinct from special scientific knowledge, always involves valuation, preferential attachment to special types of objects and courses of action. Beliefs moreover are intimately attached to customs and institutions, partly as effects, partly as causes, so that forces which impinge upon institutions and tend to unsettle them have a disturbing impact upon beliefs, and vice versa. Thus philosophies are generated and are particularly active in periods of marked social change, provided of course that the people undergoing change have sufficient powers of reflection to undertake the task of abstraction and generalization.

This last statement obviously applies to the origin and development of philosophy in Greece; to the twelfth century, when Christian doctrine received comprehensive formulation; to the Renaissance; to the seventeenth century, when the scientific revolution occurred; to the eighteenth, when there dawned a conception of the applicability of science to a progressive determination of social life. When once the principles underlying beliefs and valuations have received formal statement, the resulting concepts obtain a certain independent intellectual existence of their own and are capable of having their own career without reference to the cultural conditions of their origin. This secondary and derived existence is accentuated when, as so often happens, professional teachers are the chief guardians and representatives of philosophy.

From one point of view, then, the chief role of philosophy is to bring to consciousness, in an intellectualized form, or in the form of problems, the most important shocks and inherent troubles

of complex and changing societies since these have to do with conflicts of value. Viewed with reference to this highly general function, historic systems tend to divide into the conserving and the revolutionary. The tendency of some is to preserve the values that are already embodied in the traditional, relatively established order. They accomplish this task by giving these values a reasoned statement and by setting forth their rational justification. Other thinkers, sometimes the most important of an entire generation, are acutely conscious of the deficiencies and corruptions of the existent order. They shape their logical methods, their interpretations of knowledge and even their interpretations of the cosmic order, with a view to showing the necessity of radical changes and to pointing out the character of needed reforms.

In this general sense the philosophy of Plato is "revolutionary," that of Aristotle is "conserving." The so-called transcendentalism of Plato, his insistence upon pure forms apart from concrete incarnation as standards of existence, is directly associated with his desire for thoroughgoing reform. To change the actual he required leverage outside of the actually existent, an independent realm of possibilities higher in value and potency than anything found in existence. Aristotle's insistence that forms have no existence apart from their actual embodiment corresponds, on the other hand, with his general tendency to rationalize the existent world by exhibiting it as containing upon the whole (special aberrations excepted) all the meaning and value that the nature of the case permits. His oft cited justification of slavery, for example, does not indicate a private harsh preference on his part, but an attempt to find a rational meaning in a universally established institution. The formulations of scholasticism are of the same rationalizing import, finding an underlying meaning to justify the beliefs and practises sanctioned by the church. The general tendency of eighteenth century thought, on the contrary, was determined by Locke and also, as regards the *encyclopédistes* and Condorcet, by Bacon; it was critical of if not actually hostile to existing institutions, and it used the new sciences of nature to project ideals of a new and better future. In contrast, the philosophy of Germany in the first half of the nineteenth century, culminating in Hegel, was distinctively justificatory of the main types of existence, exhibiting them as necessary stages in the self-manifestation of absolute mind and treating the French Revolution as proof of

the bankruptcy of the opposite empirical philosophy.

The opposition is never as polar in fact as are the tendencies in the abstract. There is always a certain amount of adverse criticism and of implicit condemnation in the philosophies whose main purport it is to exhibit the meaning implicit in the existent forms of nature and culture. For in justifying the logical content of their philosophies, thinkers are usually compelled to indicate the transitory and relatively unimportant character of some of the particular forms in which they are embodied, regarding them as husks in comparison with the inner kernel. Thus Hegel, for example, treated the doctrines and institutions of Christianity; their rational meaning was sound, but their garb was that of the pictorial imagination. Since his interpretation excluded acceptance of the supernatural in its received sense, the effect was "revolutionary" as far as popular belief was concerned. On the other hand, thinkers who are most critical of the status quo are compelled, in order to get a foothold for intentional change, to accept and justify some features of the existing order, although their usual method is to resort to an idealized view of the ideas of an earlier epoch. Thus historic philosophies constitute a spectrum rather than cluster about opposite poles.

Irrespective of the tendency of a reforming philosophy to resort to a prior culture in which it is assumed that its own doctrines and ideals were embodied in a "pure" form, the generalized character of a philosophic statement renders it peculiarly available for formal transfer from one cultural situation to another. The actual state of the world and of science in the mediaeval period, when Christian doctrine was formulated in a metaphysical theology that also embraced the entire universe of extant knowledge, had little similarity to the culture of the time in which Aristotle wrote. Nevertheless, the abstract generality of the latter made it possible for the scholastics to use Aristotelian doctrines as the intellectual framework of their system. The administrative genius of Rome was alien to free speculation, but it fell back upon Greek philosophers to achieve a formulation which would be sufficiently comprehensive to meet the complex needs of the empire. The dawning science of the Renaissance reverted to Platonic and pre-Socratic thought in order to achieve emancipation from fossilized Aristotelianism. In spite of the distance that separated the territorial national state of the nineteenth century from

the small city-state of antiquity, Hegel and his followers employed the political philosophy of Plato and Aristotle to interpret and justify the structure and procedures of the European states of their day. The thought of Spinoza, condemned in his own time, came to life in the non-mathematical organic vitalism of Herder and Goethe. In general it may be said that the philosophies that seem to their immediate contemporaries to be wilful novelties (because they depart from doctrines that have become conventionally current) are more often in line with some great traditional current than are the intellectual fashions that cry out against them. For the former go back and lay hold upon some leading generalization that has become obscured.

The specific cultural contributions of philosophy have been in natural science and the social disciplines, the latter including education. Philosophy has been the matrix within which the conceptions that have given new direction in both the physical and the human fields were conceived and nourished. It has served this purpose in two ways, the first of which is comparatively accidental and external, although one that has at times been practically helpful to the progress of scientific inquiry. For example, there can be little doubt that the acceptance of mathematical mechanics for interpreting physical phenomena was facilitated (in its struggle with the qualitative teleological science inherited from Aristotle) by Descartes' dualistic separation of the material world from mind and by the use that he made of a thoroughly spiritualistic rationalism and theism to explain the nature and justify the role of mathematical conceptions.

The really important role of philosophy in science, however, is intrinsic. The notion that science proceeds merely by the accumulation of observations unregulated by theory has no support from the history of scientific inquiry. There is a basic reason for this. Fruitful observations cannot be made nor can their results be arranged and coordinated without the use of hypotheses, of ideas that go beyond the existing state of knowledge. The origin of modern science is to be understood as much by the substitution of new comprehensive guiding ideas for those which had previously obtained as by improvement of the means and appliances of observation. By the necessity of the case, comprehensive directive hypotheses belong in their original formulation to philosophy rather than to science. For they outrun past knowledge and even the possibility of adequate test by contemporary

means to such an extent that they are speculative in nature. Only later do they become an accepted part of that body of beliefs that is termed science.

Cases in point are the mathematico-mechanical conceptions that played such a part from the time of Descartes and Newton; the idea of evolution that was developed speculatively and applied to human history long before it could be used to direct specific inquiries in geology and biology; the doctrines of the conservation of matter and energy and so on. Indeed conceptions that are now the commonplace foundations of science and that seem to be self-evident in clarity are, if traced back, philosophical in origin. Such is the case, for example, with the ideas of motion, matter and energy, of atoms, of continuity and discreteness. But it must not be understood from this statement that philosophy has some inherent sovereignty over science. It means in fact that the division between philosophy and natural science is often arbitrary. What actually exists is a certain division of labor, in which the more speculative and hypothetical phase of intellectual activity is distinguished as philosophical and the more detailed and specifically verified part as scientific. The distinction that is made, *ex post facto*, is of temporal aspects of development rather than of something intrinsic. While it is true, as Lewes and some of the positivists have contended, that what was once philosophy is now science, the conclusion that philosophy is bound ultimately to disappear in science does not hold, at least not unless significant advance in science is to come to an end. For it is equally true that the generative ideas of future science will appear first in a speculative or philosophical form.

The intrinsic need of scientific progress for free speculation is reenforced by a cause which is moral or psychological in character. The human mind is subject, in its higher as well as in its more casual and directly practical activities, to the principle of habit and inertia. When scientific investigation gets definitely launched in a given direction, depending upon certain guiding ideas, it tends to move in grooves. Even when difficulties are encountered, the tendency is to follow the line of least resistance and to make some minor adaptation in the directive concept instead of trying some other principle. The use of epicycles in Ptolemaic astronomy is an example of a principle not confined to astronomy. All scientific theories tend to assume at some stage an epicyclical form. Thus it often

happens that a philosopher, approaching the matter from a different point of view from that which obtains in current science and breaking loose from concepts that have become conventional through use, will initiate a fruitful line of inquiry. Even ignorance or lack of specialized knowledge may be an aid in freeing imagination and permitting the generation of ideas that give a new direction to interest and attention.

It is not claimed of course that this particular role of philosophy with respect to science has always been beneficial. Sometimes positive inquiry has been either started off or else confirmed in lines that lead nowhere by philosophy. There has been an overproduction in philosophy of speculative hypotheses, especially with respect to those advanced as being proved by intuition or reason apart from experimental evidence. Nevertheless, the philosophic function is indispensable, and a certain amount of excess production and seeming waste is necessary in order to insure freedom and flexibility in scientific advance.

The cultural role of philosophy has been even more extensive in social and political theories and the practical movements connected with the latter than in the natural sciences. Indeed it would be difficult to find in the social disciplines an important idea whose origin cannot be traced to one or another historic system of philosophy. The thoroughness with which philosophic ideas have been wrenched loose from their original context and given a career of their own in jurisprudence, political science and economics is the chief reason why their origin in philosophy can so easily be ignored. The influence of Greek philosophy upon Roman law, partly through the stoics and partly by more indirect channels, has already been alluded to. The very concept of law was indeed philosophical in origin. The idea of the "law of nature" was central in the ethical and political theories of the scholastic thinkers, and the organizing principle of all jurisprudence. It was given a new interpretation in the sixteenth and seventeenth centuries and became at the hands of Grotius the generating, directive idea of international law as regulative of war and peace. It is almost superfluous to point out the practical influence of the conception of natural rights in the seventeenth and eighteenth centuries and its effect upon the formation of political constitutions as well as upon court decisions far into the nineteenth century—nor is its power exhausted even now. Yet the idea originated not

in legislative or judicial halls but in abstract theory.

The concept of sovereignty, which has had such an enormous role in political organization and practise, was quickly taken up by statesmen and made the basis and justification of their activities. But for the most part the idea received reasoned formulation at the hands of philosophers, in its extreme form by Hobbes and Spinoza and in its limited, or "liberal," form by John Locke. John Austin could not be classed as a philosopher in the technical sense of that term, but he (like Jeremy Bentham, who was specifically a moral and political philosopher) is not explicable historically apart from a philosophical tradition that includes Hobbes and also a thinker very different from Hobbes, namely David Hume. The entire conception of what Bentham called the "omniscience" of the legislature is strictly philosophical in origin.

As in the case of the natural sciences, many of the ideas borrowed by political theory and taken over into practical political life have had unfortunate consequences. This is particularly true because as a rule these ideas and their rational support have been set forth as if possessed of universal validity, instead of as directive intellectual instrumentalities for particular periods. Hence they have often had their greatest influence in a sense opposite to that entertained by their original promulgators. The use made in the nineteenth century of the doctrine of natural rights, or of liberty of contract, to protect property in a privileged position is a case in point, for in its early phase it was a weapon of attack upon the class then having legal and political control. Nevertheless, the role of philosophy is indispensable if political activity is to rise above rule of thumb procedure. Only leading ideas, not themselves verified at the time or indeed verifiable in a strict positivistic sense, can bind together the mass of empirical details of political practise into an organized whole and thus canalize aspiration and endeavor toward definite ends.

What is true of law and politics is equally true of economics. In Plato and Aristotle economics is definitely subordinated to politics; and politics is a branch, the most important branch, of ethical theory. Upon the whole this conception remained dominant into the seventeenth century. The rise of the natural sciences produced in the eighteenth century a new conception of nature and of natural law, now distinguished not

from positive law but from artificial, man made regulations. Social phenomena were regarded as expressions of human nature in a definite technical sense whereby "nature" was set over against deliberate and conscious arrangement and control, the latter being artificial. The consequence was that economic relations like that of supply and demand were treated as "natural" laws, and political relations as artificial and secondary. The philosophical psychology associated with classic political and legal theory had set up ideas and reason as the ruling factors in man. The theory of human nature which the philosophy of economics brought forward treated wants as fundamental and ideas as subordinate. "Reason" was merely the power of calculating the means by which desires could be satisfied economically and effectively. This mode of theorizing coincided with the growth of industry following the industrial revolution and was used as a weapon to free commerce from regulations adapted to feudal agrarianism but now operating to shackle human activity. The alleged "scientific" form of the psychology that was employed disguised the strictly philosophic character of the basic ideas of the new economics and of the whole laissez faire economy and politics.

There is an obvious reason why the affiliation of philosophy is more intimate in the case of the social sciences than in that of the physical. The former are more directly connected with problems of policy, and problems of policy all involve ends and purposes, and hence judgments of value. This fact is peculiarly conspicuous in the career of philosophy as matrix of educational theory and practise. Every important movement in education having conscious direction, that is, every one that does not follow tradition and custom, has been initiated by some philosophic development. The basic educational import of Plato's philosophy is clearly brought out in his *Republic*; and while it had no practical effect in its own day, its conception of the relation of education and social reform has since inspired members of different schools of thought. The fact that the philosophers of the mediaeval period are known as the schoolmen and that the philosophy of the period has the name of scholasticism is sufficient evidence of the close union of philosophy and education during that period. John Locke wrote specifically upon education of the young and his theories played a decided role in shaping Rousseau's *Émile*. It is probable also that the influence of his essay on human

understanding and his treatise on civil government in formulating the intellectual creed of liberalism had an even more marked effect upon subsequent educational ideas than his express writings on the subject. The conception of the omnipotence of education in forming mind and character, presented most explicitly by Helvétius, was a direct outcome of Locke's theory of the receptivity of the mind to impressions from without.

The two leading directions of educational thought in Germany in the early nineteenth century were set by philosophy. The dominant theories of method in instruction and discipline were derived from the thought of Herbart. The conception of education as an expression of national culture and a means of maintaining its vitality came from the idealistic school. While the most striking single manifestation of this fact is the influence of Fichte in promoting a moral revival after the Napoleonic defeat, the influence of the Hegelian philosophy of history and the state permeated far beyond the bounds of strictly Hegelian circles. In Great Britain John Stuart Mill and Herbert Spencer carried over into education the influence of the opposed empirical school, Spencer in particular constituting himself the champion of the claims of natural science.

In addition to the definite services of philosophy in generating ideas that inspire and direct thinking in the physical and social fields, philosophy exercises a third and rather indirect and vague function. Although few philosophers have found a significant aesthetic form of expression for their ideas, when expression is judged by the criterion of literature, nevertheless philosophy performs for some exactly the same office that the fine arts perform for others. There is a kind of music of ideas that appeals, apart from any question of empirical verification, to the minds of thinkers, who derive an emotional satisfaction from an imaginative play synthesis of ideas obtainable by them in no other way. The objective side of this phenomenon is the role of philosophy in bringing to a focus of unity and clarity the ideas that are at work in a given period more or less independently of one another, in separate cultural streams. Much of the culture characteristic of the eighteenth century is summed up for all subsequent history in the Enlightenment, and the Enlightenment is definitely a philosophical synthesis. The same is true of the romanticism of the nineteenth century, especially in Germany. It applies also

to the vogue, during the latter part of the nineteenth century, of the idea of universal evolution. The significance of such synthesizing ideas is more or less independent of the question of verifiability. The human mind, taken collectively, experiences the need of holding itself together, and during periods of rapid influx of new materials and the inception of new and diverging tendencies, accomplishes this task by means of comprehensive speculative ideas.

On the other hand, the failure from the standpoint of verifiability of these adventures in synthesis is one cause, and a rather large cause, of the comparative eclipse of philosophy in recent days. If such ventures were frankly offered as imaginative, without claiming objective truth, it is probable that the reaction against philosophy provoked by them (and largely in proportion to their previous vogue) would not occur. The positive cause which accounts for the recent comparative decline of the prestige of philosophy is found, however, in the tremendous multiplication of specialized knowledge and in the irreconcilable divergences among social tendencies characteristic of the present time. Uncertainty in the position of religion, due to its affiliation with a supernaturalism that is discredited from the standpoint of natural science; the enormous mass of specialized detail in science; sharp conflicts between movements in politics and economic life, between tradition and innovation, have often forced philosophy into either taking sides and becoming the intellectual partisan of a particular movement, or else withdrawing completely from the field of vital common experience and becoming itself another technical mode of specialization. The recent general revival of formalism in philosophical thought is probably to be accounted for on this basis. Judging from past history, this divided and crippled state of philosophy is a transitional phenomenon, preliminary to the appearance of comprehensive even if rival formulations, as subject matter is better digested and the lines of cleavage in social movements become more articulate. From the standpoint of culture philosophy is a perennial adventure of the human spirit.

JOHN DEWEY

See: RELIGION; ETHICS; SCIENCE; LOGIC; METHOD, SCIENTIFIC; IDEALISM; MATERIALISM; RATIONALISM; REALISM; NATURALISM; PRAGMATISM; POSITIVISM; EDUCATION; POLITICAL SCIENCE; SOCIOLOGY; VALUES.

Consult: Paulsen, Friedrich, *Einleitung in die Philosophie* (24th ed. Stuttgart 1912), tr. from 3rd German ed. by Frank Thilly (2nd ed. New York 1898);

of Commerce. Private companies as a rule furnish towage, lighterage, car floats, car ferries and floating elevators. In some ports towboats and elevator equipment are owned and operated by the port authority.

Ports should be self-liquidating. It has been argued by one group of experts, which is particularly representative of the opinion of the inland waterway port cities of Europe, that the public benefits and the increase in returns and taxes from manufacturing and wholesale distributing enterprises attracted to the port must more than compensate the public treasury for any losses in the cost of operation, interest and sinking fund charges on particular port investments. However, a carefully planned port, which is based upon a clear understanding of the economic benefits it can confer upon a large and active hinterland and additions to whose plan are made only as initial terminal units become crowded, should reasonably be expected to pay for itself. Returns from rates for transfer, wharfage, handling, warehousing, switching and the like may be counted upon not only to pay for operation, maintenance, interest and sinking fund charges but also to pass on substantial savings to the users.

ROY S. MACELWEE

See: FREE PORTS AND FREE ZONES; LONGSHOREMEN; SHIPPING; MERCHANT MARINE; SEAMEN; WAREHOUSING; TERMINALS; WATERWAYS, INLAND; CUSTOMS DUTIES; COMMERCE; COMMERCIAL ROUTES; COMFACTS, INTERSTATE.

Consult: MacElwee, R. S., *Ports and Terminal Facilities* (2nd ed. New York 1926), and *Port Development* (New York 1925); MacElwee, R. S., and Taylor, T. R., *Wharf Management, Stevedoring and Storage* (New York 1921); Cunningham, Bryson, *Port Economics* (London 1926), *Port Administration and Operation* (London 1925), *Cargo Handling at Ports* (London 1923), and *Port Studies* (New York 1929); *The Shipping World, Afloat and Ashore*, ed. by John A. Todd (London 1929) chs. xiii, xv; Wiedenfeld, Kurt, *Die nordwesteuropäischen Welthäfen, in ihrer Verkehrs- und Handelsbedeutung* (Berlin 1903); Owen, Douglas, *Ports and Docks* (London 1904); "Water Terminals" in United States, Bureau of Corporations, *Report on Transportation by Water in the United States*, 4 vols. (1909-13) pt. iii; "Ports of the United States. Report on Terminal Facilities, Commerce, Port Charges and Administration at Sixty-eight Selected Ports," by G. M. Jones, United States, Bureau of Foreign and Domestic Commerce, *Miscellaneous Series*, no. 33 (1916); United States, Board of Engineers for Rivers and Harbors, *Shore Control and Port Administration* (1923); "The Co-ordination and Development of Transport" in Great Britain, Royal Commission on Transport, *Reports*, vol. iii, Cmd. 3751 (1931); Comité Central des Armateurs de France, Paris, *Les ports maritimes français* (Paris 1924); "Über Hafen-

verwaltungen im In- und Auslande" in Hafenbautechnische Gesellschaft, Hamburg, *Jahrbuch*, vol. xii (1930-31) 181-227; Rühl, Alfred, *Die Nord- und Ostseehäfen im deutschen Aussenhandel* (Berlin 1920); Amzalak, M. B., *Portos comerciais* (Lisbon 1923); Reid, W. A., *Ports and Harbors of South America*, Pan American Union, Ports and Harbors series, no. 1 (Washington 1926); MacElwee, R. S., *Wesen und Entwicklung der Hamburger Hafenbaupolitik* (Hamburg 1917); Clapp, Edwin J., *The Port of Hamburg* (New Haven 1911); Fluegel, H., *Die deutschen Welthäfen, Hamburg und Bremen* (Jena 1914); Rush, Thomas E., *The Port of New York* (New York 1920); Clapp, Edwin J., *The Port of Boston* (New Haven 1916); Helander, S., *Die internationale Schifffahrtskrise und ihre weltwirtschaftliche Bedeutung*, Kiel Universität, Institut für Weltwirtschaft und Seeverkehr, Probleme der Weltwirtschaft, vol. xlii (Jena 1928); National Rivers and Harbors Congress, *Proceedings of Annual Convention*, published in Baltimore since 1901; *Schifffahrt-Jahrbuch*, published in Hamburg since 1921; *Shipping World Year Book*, published in London since 1887; *World Ports*, published monthly in Montreal since 1920; *Dock and Harbour Authority*, published monthly in London since 1923.

POSITIVISM is a term which designates a philosophical tendency oriented around natural science and striving for a unified view of the world of phenomena, both physical and human, through the application of the methods and the extension of the results whereby the natural sciences have attained their unrivaled position in the modern world. From the point of view of methodology the term "positive" is conceived in polemical opposition to the metaphysical abstractions of traditional philosophy. One calls "positive" the facts and things of immediate perception as well as the relations and uniformities which thought may discover in them without transcending experience. On the other hand, one calls "metaphysical" every inquiry which claims to go beyond the sphere of the empirical and seeks either hidden essences behind phenomenal appearances, or ultimate efficient and final causes behind things, as well as any attempt to attribute reality to species, ideas, concepts or the mind's logical "intentions" in general. Inasmuch as the natural sciences, which early became dissociated from such sterile inquiries, have rapidly achieved a notable degree of exactness and objectivity and have been able to avoid the vain fluctuation of opinion, it is permissible to believe that through a similar delimitation of its sphere and an analogous purification of its concepts philosophy too might reach the same degree of certainty and scientific objectivity.

From the standpoint of results and aims of knowledge positivism shares with science the

practical ideal of knowledge in contrast to the merely contemplative and speculative goals of metaphysics. The aim of knowledge should not end with knowledge itself, with an otiose complacency in its own superiority and aloofness from the interests and cares of ordinary existence; it should embrace the real world. To know in order to foresee and provide, that is to say, to know in order to have a useful guide for conduct and to be in a position to control the forces of nature for the sake of the commonweal, is the motto of science and of that philosophy which would ally itself to science. From this circumstance arises the special significance of positivism for social problems—that the practical ideal of knowledge which positivism champions finds its most useful and immediate expression in the field of human relationships, where a sagacious labor of coordination and of scientific discipline might readily achieve new levels of efficiency and order.

But against these incontestable advantages of the positivist program there may be noted certain defects which are more or less latent in its very scientific structure. These have become progressively more apparent in the course of the development of positivism. Not only the extreme difficulty of maintaining itself on a level strictly positive and not exceeding the limits of experience but also the tendency, which it shares with science, to identify objectivity with materiality, have often caused positivism to range over into materialism, that is, into a metaphysics, in contradiction to its own premises. Moreover the sudden and brutal transference of scientific procedures valid in the world of material and inanimate nature into an order of psychic and spiritual facts of an incomparably higher level has had the effect of impoverishing such facts and often of mutilating them. It is therefore not difficult to understand the reaction against the positivist interpretations of the human spirit which has developed from the side of traditional philosophy, reaching maximum intensity at the turn of the present century. Throughout the ages traditional philosophy had gathered, along with considerable dross, much experience of great profundity and subtlety concerning the spiritual life; and it therefore resented the mutilated pictures of the mind presented by positivism.

If account is taken of the positivistic trends associated with scientific thought, the history of positivism extends through the three centuries of the modern period in which the progressive

expansion of the natural sciences has taken place. From the beginning of the seventeenth century through the eighteenth there is a more or less latent positivism which reflects the increasing successes of the scientific conception of the world. But only in the nineteenth century does the positivist tendency become explicit and conscious and take form in a definite system, that of Comte, who not only gave it its appropriate name but also made its appearance the necessary end of all modern civilization in accordance with a historical law of the evolution of human thought.

The earliest traces of positivism in modern times date from the beginnings of English empirical philosophy in the seventeenth century. Francis Bacon expressed confidence in the brilliant future of the natural sciences and of humanity under their guidance. To the realization of his vision of the *regnum hominis* he made the solid contribution both of his scientific methodology and of a social program sketched out in the fragment of the *New Atlantis*. In the *Novum organum* he laid down the principles of a scientific procedure based upon observations of facts and upon inductive generalizations, singling out as goals of thought not so much universal concepts as *axiomata media*, which are really the laws of the individual sciences. In the *Advancement of Learning* he made a first classification, from a modern point of view, of the branches of knowledge, both in order to take inventory of the conquests already made and also to indicate the tasks still to be accomplished. On the other hand, in the *New Atlantis* he painted a vivid picture of a humanity saved and guided no longer by the old traditional aristocracies but by the new aristocracy of science. The new rule would substitute for the barbarous and inhuman domination of man by man the peaceful and profitable domination of nature by man and thus succeed in raising to the highest potency the inventive and constructive capacity of human genius.

Later empiricism, from Locke to Hume, went deeper into some parts of the Baconian program but neglected others which were historically less ripe. It set in ever greater relief the antimetaphysical aspect of the new scientific conception of the world, eliminating those relics of scholasticism which still remained in Bacon's thought. Locke restricted the sphere of valid consciousness to the field of pure experience as presented in sensation and elaborated by reflection. With Berkeley the metaphysical concept of substance,

which was still retained in a shadowy manner in the Lockian distinction of primary and secondary qualities and which served to give an objective and material support to sense perceptions, was entirely abolished; and the existence of objects was reduced to their perceived existence. Nevertheless, there persisted the idea of a world of spirits, in whose divine nature was placed the transcendental cause of sensible appearances. Hume cast aside even this metaphysical concept of productive causality; he held that relations of cause and effect were only temporary relationships of phenomena which habitually occurred in succession; their "necessity" was merely the result of a confirmed habit of mind. In this way the last bridge which still joined the new empiricism with the old metaphysics was broken, and the natural world was reduced to a complex of phenomenal data bound up with relations equally phenomenal; the corresponding subjective and mental world also was resolved into a bundle of sensations held together by empirical bonds of an associative nature. The mind, fortress of traditional metaphysics, was reduced to the level of nature and thus became, at least potentially, subject to the application of the same scientific methods which proved so fecund in the study of nature.

If the Baconian ideal of a science founded upon facts and empirical generalizations may be said thus to have been in process of realization, Bacon's other aspiration, that of making science the instrument of human power, social organization and progress, still remained unsatisfied. The partisans of classic empiricism were still too individualistic to be able to appreciate the social aspects and implications of the advent of the empirical sciences. Moreover in the eighteenth century the habit of the positive study of human facts was not yet fixed, being counterbalanced by too many doctrinaire influences of metaphysical origin. The latter consideration serves particularly to explain the attitude of the French Enlightenment. From the time when the young Voltaire, early in the eighteenth century, began to popularize Newtonian science in France, and Locke's doctrine of knowledge began to gain adherents in educated circles, France was won over to the new scientific ideals. But these acted on the historical consciousness as a solvent of the ancient traditions rather than as positive principles of reconstruction. For the philosophers of the Enlightenment the object of reverence and even of worship was not at all the idea of science as representing a collective labor

scarcely begun and moving forward with deliberate and cautious step—it was rather science as the symbolic incarnation of reason, capable of wiping out in one broad stroke human prejudices in every field. For this reason the *philosophes* missed precisely the most positive and empirical aspects of the new scientific revelation and in the name of science placed upon throne and altar a perfect and rational "human nature," and a no less rational "cosmic material" as the equalizer of all beings; in other words, they summoned up new incarnations of the old metaphysics. Yet in this still transcendent and utopian form the ideal of a humanity whose perfection is entrusted to the work of science and culture received under the Enlightenment certain suggestive expressions, like that of the *Esquisse d'un tableau historique des progrès de l'esprit humain* (1795) of Condorcet, which puts forward as a goal of progress the abolition of national and class distinctions and the intellectual and moral perfection of the individual.

More akin, however, to the positivist spirit of English empiricism are the utilitarian currents which converged in Helvétius in France and in Bentham in England. The idea of utility presented itself to reflection as an immediate datum of observation; scientific method was to help to free it from its too individualistic roots and from ethical criteria founded upon the confusion of utility with egoism. This work was performed with lucidity and vigor by Bentham, who was able to point out that, far from being necessarily neglected, individual utilities tend to adjust themselves in such a way as to further the general interest. This harmony of interests at the same time made possible the transition from scientific generalization to that of practical deontology; for, if the interest of the greater number is the goal toward which the spontaneous integration of the individual interests aspires, the realization of that goal becomes a duty of the ethical consciousness. There sprang from this realistic consideration of utilitarian activity two sciences: first, economics, which at least at first evolved independently of Benthamism, as analysis of the logic immanent in the play of interests in their mutual implications and complications; and, second, the science of law and legislation, the object of Bentham's most assiduous attention, which took as its starting point a radical criticism of the old teleological and metaphysical (natural law) conceptions of law and installed in their place utilitarian and empirical views. Thus Bentham sketched a constitutional code which

aimed so to place every member of the political society that his particular interests would coincide with those of the greater number. The utilitarian doctrine of law formulated by Bentham was championed in England by John Austin (1790-1859), who, however, drew from the same premise—that the general interests form the principal aim of justice and law—a directly opposite conclusion. Austin contended that the general interests would be better attained by a hereditary aristocracy than by the radical democracy favored by his predecessor.

The foundation of a definite positivist school, in which these implicit tendencies became completely explicit, dates from the French philosopher Auguste Comte (1798-1857). He had devoted himself to scientific studies and in his youth frequented Saint-Simonian circles, so that he was led by his very education to bring together the speculative and practical trends which were to form the system of positivism. Comte's *Cours de philosophie positive* (1830-42) made the advent of positivism the epilogue of the intellectual evolution of humanity and enunciated the famous law of the three stages of philosophic thought: the first, theological, in which thought has recourse to the intervention of supernatural and divine beings for the explanation of phenomena; the second, metaphysical, in which abstract rational entities, such as substance, essence, form and cause, are posited as explanatory principles; the third, positive, in which facts are understood in their empirical certainty and in their phenomenal connections. In order to present a positive theoretical picture of the intellectual cosmos Comte sketched out a general classification of the sciences according to the degrees of increasing complexity of their subject matter, which were, correspondingly, degrees of diminishing generality of their respective concepts. Thus at the initial stage of the scientific hierarchy (more general and less complex) he placed mathematics; above this, astronomy; then physics, chemistry, biology; and finally sociology as the doctrine of human facts and relationships, which are the most complex and particularized of the whole series. In his conception of this order he avoided the easy simplifications of materialism: every stage represented something which could not be reduced to the preceding stage—a new phenomenal level demanding its own explanation, connected, to be sure, with that of the lower grades but emerging above these with autonomous specific character.

It was to sociology, which he had placed at the summit of the hierarchy of the sciences, that Comte devoted his attention by preference. In depicting the structure of this discipline he made considerable use of his Saint-Simonian experiences, which inclined him to consider society as an organic whole of an order superior not only to physiological organisms but also to the psychic individuals composing it; he endowed it with its own autonomous life governed by its own peculiar laws. But, as was true also of his Saint-Simonian predecessors, Comte exaggerated the bearing of these organismic premises, even to the point of making society a compressing force obliterating the freedom of the individuals subjected to it as well as of sanctioning, under the aegis of science, a new despotism, graver than that which in the past had inspired the theocratic and to a certain extent the natural law systems (those, for example, of Hobbes and Spinoza). Moreover in his last years, by a sort of theological involution of his thought, he made sociology the formative principle of a religion of humanity and founded a positivist church; although to some of his own followers, such as Littré, this appeared to be a deviation from the scientific tenor of his thought, it later found many groups of adherents in Europe and the United States.

Stemming from Comte, and with more or less dependence on his system, the idea of a new positive and scientific era of human thought was adopted widely by scholars during the second half of the nineteenth century, each striving individually to mold it to his own special interest. Thus John Stuart Mill, pursuing the tradition of Hume and Bentham and developing it in the light of the new ideals, gave systematic formulation to the principles of inductive and deductive logic and of empirical epistemology. Spencer and Huxley labored to graft upon positivism that great branch of modern science which, under the name of evolutionism, arose from the researches of Darwin on the origin and transformation of organic species. And even in the schools of metaphysical origin the positivistic command to remain within the limits of experience was strongly felt. Especially among the followers of Kant there arose the cry, which had loud reverberations in Germany and elsewhere, *keine Metaphysik mehr!* Under the name neo-Kantianism the slogan gave rise to a movement tending to dissociate the pure philosophy of Kant from the metaphysical and theological deformations which it had suffered at the hands

of the post-Kantian idealists, Fichte, Schelling and Hegel. As Comte himself had recognized, Kant was the one metaphysician who had approached most closely to the positive philosophy; his *Critique of Pure Reason* had restricted the domain of valid consciousness to the experimental field of phenomena and had denounced the illusions of reason which attempt to invade the forbidden realm of things-in-themselves, or noumena. If Kant had in some degree gone beyond the limits of phenomenal relationships in his ethical doctrine, his disciples, more imbued with the positive spirit, easily succeeded in ruling out these incursions from their thinking, confining themselves rigorously to the phenomenalistic conclusions presented in the *Critique*.

Particularly fruitful was the union of the positive mentality with Darwinism in humanistic culture and the social disciplines. In the science of language new vigor was given to researches of a genetic and comparative nature; in scholarship philological investigations took on a preponderating importance; in literature and art realism and naturalism struck out along new paths, aiming to express life as it is rather than to idealize and embellish it; in literary and political history large philosophical syntheses were set aside in favor of minute and patient reconstructions of facts; in the science of religions the human factors in the development of religious experience were sought out; while in the social disciplines the interest of the inquirer revolved about ethnographic and palaeo-ethnographic reconstructions and the comparative study of the various forms and stages of civilization. Even the circles at first most hostile to positivism, such as those of Catholic culture and tendency, were drawn more and more in the new direction, although they remained perplexed and reserved. In the field of literary criticism the example of Brunetière is typical; he saw in evolution, which contradicted the belief in a rationally perfect human nature, an unexpected confirmation of the Christian dogma of original sin and therefore applied evolutionary criteria to the studies of the literary genres, conceived by him, after the manner of organic species, as capable of development, transformation and degeneration.

Comtian sociology, the positivist science par excellence, had its most systematic devotee in Émile Durkheim, who stripped it of its theological residue as well as of the reactionary political influences of its founder. Durkheim succeeded in maintaining with vigor and scien-

tific clarity the autonomy of the social organism as distinct from the individuals who compose it. Uniting, mingling, fusing together, the individual psyches give birth to a being, psychic perhaps, but constituting a psychic individuality of a new order, which is not a metaphysical entity but simply connotes the specific nature of the social phenomenon. And to avoid the danger which Comte had incurred, of an oppression of the individuals by society, Durkheim in *De la division du travail social* (1893) showed that the same factors which have produced social specialization and hence have apparently encroached upon the autonomy of the individuals have in reality contributed to their progressive emancipation. The division of labor itself promotes this liberation, because the individual human natures by becoming specialized become also more complex and therefore exempt in part from collective action and from hereditary influences, which can coerce only simple and general entities. Thus society may exist and impose itself upon the individual without depriving him of his own *raison d'être*: between the two forces there is cooperation, not conflict. On the basis of this conciliatory criterion Durkheim and his school have carried out broad scientific explorations of human society and have investigated the laws which govern the different forms of association and the various institutions in which the organizing spirit of humanity has become embodied in the course of history.

At the present time positivism can scarcely claim that hegemony over world culture which it maintained until the close of the nineteenth century. Other movements have sprung up in rivalry and often in opposition to it. All that may be stated with certainty is that positivism has largely permeated with its own spirit its contemporary rivals and antagonists, each of which in its own way tends to achieve a positive view of reality, and, even when reverting to the metaphysical trends of the past, eschews the more abstract and purely speculative elements. But Spencer's ideal of a philosophy as a universal synthesis of the results of all the separate sciences is being rapidly discredited. The immense progress made by the sciences in a few decades has shown how precarious is every philosophical construction founded upon provisional and transitory conceptions; and at the same time the very logic of philosophy could not but hasten the repudiation of a conception claiming to construct a universal system as a mosaic of disparate pieces, never recast in the crucible of

thought. The positivistic movement has proved much more fruitful in the task of critical reflection upon the sciences of nature than in the non-critical prosecution of scientific work.

From this point of view Mach's empirio-critical conception is particularly important. He views the work of science under the category of economy, seeing concepts, hypotheses and laws as so many means of abbreviation and simplification enabling the thinker to grasp with a minimum of effort, and hence with a maximum of economy, the infinite multiplicity of perceptible and experimental data. In his *Die Mechanik* (1883) Mach shows how this principle works in the development of a single science and how it implicitly necessitates the gradual repudiation of complicated and abstract concepts; for example, that of metaphysical causality. His *Analyse der Empfindungen* (1886) provides a further application of this principle, showing that it is uneconomical to complicate the unique reality which consciousness reveals by setting up a dualism of an objective material world and a subjective sensible world, and that it is possible to reduce to sense data all that is needed to satisfy the demands of scientific objectivity and conscious subjectivity.

Following the same line of thought the empirio-criticism of Avenarius, in a very abstruse psycho-physiological inquiry, traces the origin of the principle of mental economy to the functional mechanism of the central nervous system itself. A positivist character attaches also to the so-called phenomenology of Husserl, who would confine philosophical research to the sphere of the immediate revelation of consciousness, eliminating every problem of transcendental existence and causality as tending to force thought beyond the limits of empirical consciousness. A kindred position is that of the so-called philosophy of immanence (Schuppe, Rehmke and others), while analogous motives may be discovered also in certain exponents of modern English and American realism. These same tendencies have recently found new expression in the "logical positivism" of the Vienna School (Schlick, Carnap and others), which has assigned to theoretical philosophy the task of studying pure mental structures, that is, logical articulations of psychic complexes, and has excluded, as pertaining to metaphysics, every quest for physical and psychical essences.

These various trends, with the possible exception of that of Mach, which seems to some intellectual exponents of Russian socialism to

furnish the criterion of a positive interpretation of human society, are generally sterile in social and political application. Some phases of American pragmatism, on the contrary, appear to be very fertile in this respect, particularly that represented by John Dewey. In a broad sense Dewey may be called a positivist in that he champions a scientific view of reality and extols that active experimentalism which has in modern times profoundly modified the attitude of the mind toward physical nature. But for Dewey reflective and critical work on the theory of science represents but a preliminary part of the philosophical task; the other and more important part must consist in the application of the methods of science to the organization and control of the relationships of human society, which in numerous respects are still dominated by antiquated traditions and customs. The notorious incongruity between the perfection of scientific technique and the imperfection and disorder of the machinery of social organization constitutes a powerful incentive to reforming and reconstructive activity guided by philosophical reflection.

GUIDO DE RUGGIERO

See: PHILOSOPHY; SCIENCE; METHOD, SCIENTIFIC; LOGIC; MATERIALISM; UTILITARIANISM; ENLIGHTENMENT; PRAGMATISM; SOCIAL REFORM; SOCIOLOGY; EVOLUTION; PROGRESS.

Consult: Überweg, Friedrich, *Grundriss der Geschichte der Philosophie*, 5 vols. (11-12th eds. Berlin 1923-28) vol. iii, p. 351-448, 685-703, vol. iv, p. 378-416, and vol. v, p. 15-20, 70-72; Cassirer, Ernst, *Die Philosophie der Aufklärung* (Tübingen 1932). FOR COMTIAN POSITIVISM: Comte, A., *Cours de philosophie positive*, 6 vols. (5th ed. Paris 1892-94), abridged and translated by H. Martineau, 2 vols. (3rd ed. London 1893), and *Système de politique positive; Traité de sociologie instituant la religion de l'humanité*, 4 vols. (3rd ed. Paris 1890-95), English translation (London 1875-77); Mill, J. S., *Auguste Comte and Positivism* (5th ed. London 1907); Huxley, T. H., "The Scientific Aspects of Positivism" in his *Lay Sermons, Addresses, and Reviews* (3rd ed. London 1870) ch. viii; Caird, Edward, *The Social Philosophy and Religion of Comte* (2nd ed. London 1893); Lévy-Bruhl, Lucien, *La philosophie d'Auguste Comte* (Paris 1900), tr. by Kathleen de Beaumont-Klein (London 1903); Milhaud, Gaston, *Le positivisme et le progrès de l'esprit* (Paris 1902); Michel, Henri, *L'idée de l'état: essai critique sur l'histoire des théories sociales et politiques en France depuis la Révolution* (3rd ed. Paris 1898). FOR POST-COMTIAN POSITIVISM: Gruber, Hermann, *Der Positivismus vom Tode Augusti Comtes bis auf unsere Tage (1857-1891)*, Stimmen aus Maria-Laach, supplementary vol. lii (Freiburg i.Br. 1891); Murray, R. H., *Studies in the English Social and Political Thinkers of the Nineteenth Century*, 2 vols. (Cambridge, Eng. 1929) vol. i, ch. x, and vol. ii, p. 9-14; Harrison, Frederic, *The Positive Evolution of*

and the fact that his organization was not well adapted to strict collective bargaining for wages, hours and conditions of work enabled Gompers to set up and maintain against the Knights the business unionism of the American Federation of Labor. While the Knights of Labor moved to the left and Powderly moved in the opposite direction, Gompers stood sturdily between the two.

NORMAN J. WARE

Consult: Ware, Norman J., *The Labor Movement in the United States, 1860-1895* (New York 1929); Commons, J. R., and associates, *History of Labour in the United States*, 2 vols. (New York 1918) vol. ii.

POWELL, JOHN WESLEY (1834-1902), American geologist and anthropologist. In 1867 and 1868 as professor of geology in Illinois Wesleyan College Powell led research expeditions to Colorado; he was thus the first instructor to combine field teaching with western exploration. These expeditions initiated his broader scientific career, for they revealed to him the vast possibilities for geological and geographical research and stimulated his interest in ethnological work. The following year, on an expedition under the direction of the Smithsonian Institution designed primarily to collect ethnological data, Powell and his party explored in boats the canyons of the Green and Colorado rivers; his account of this difficult and dangerous feat has become one of the classics of exploration in the United States. He then participated in a series of successive surveys devoted to geological and ethnological problems, until in 1879 he was put in charge of the newly organized Bureau of American Ethnology. In 1881 he succeeded King as director of the United States Geological Survey, which he had helped to create two years earlier; in 1894 he resigned to devote his attention to the development of the bureau. It is largely because of his effective administration of these organizations that he ranks as one of the most influential American scientists of the nineteenth century.

Powell's theoretical contributions to geology and physiography were related chiefly to his work on erosion and deposition. He was instrumental in promoting correct knowledge of the arid lands of the United States and their possible economic utilization; his comprehensive and now famous report on this subject written in 1877, warning of the danger of monopoly in the ownership of the nation's water supplies, inaugurated the movement which resulted in the

establishment of the United States Bureau of Reclamation.

Powell's studies of primitive society were strongly influenced by the writings of Lewis H. Morgan; his specific contributions in this field were his authoritative linguistic map of North America north of Mexico, some notes on the Ute Indians and a study of the Wyandot government. He participated in the animated controversy on totemism, which he sought to explain as a doctrine of naming. Under the influence of Lester F. Ward, Powell contended in his sociological writings that human evolution is fundamentally intellectual evolution and that, in contrast with the lower animals, man transforms the environment. Toward the close of his life he sought to formulate a system of philosophy, which he called a "science of intellection," designed to reflect recent advances in scientific thought.

BERNHARD J. STERN

Consult: Warman, P. C., "Bibliography of Works of J. W. Powell" in Washington Academy of Science, *Proceedings*, vol. v (1903) 131-87; Davis, W. M., *Biographical Memoir of John Wesley Powell*, National Academy of Sciences, Biographical Memoirs, vol. viii (Washington 1915) p. 11-83.

POWER, INDUSTRIAL. It is difficult to limit the definition or to restrict the application of the term power, which includes all forms of technical utilization of natural energy. In its industrial aspect, however, the term may be limited to the most accessible and the most widely used forms of power. These include the use of water or wind power; hydraulic pressures where these are applied for motive power purposes; the combustion of fuel of all kinds to drive, directly or indirectly, power equipment, where the main activity is contributory to the production of some article of economic value or to some service which is translated ultimately into the production, distribution or marketing of industrial products or services. It must be borne in mind that in an economically highly developed nation the non-industrial uses of power may transcend its industrial uses; thus it has been estimated that in the United States, in 1929, 72 percent of an available 1,000,000,000 horse power was installed under the hoods of pleasure automobiles.

Under modern conditions almost every economic activity is conditioned by power as applied to industry and the exploitation of natural resources. Industry is dependent on power, even though there are still a few groups of activities, such as small rural industries, which in some

measure use manual power; but even these industries require raw materials, the extraction and elaboration of which may be dependent on power driven processes. The output of coal has been enormously increased and a whole group of new industries has come into existence to supply power or the means of generating power, including electricity, gas, oil and to some extent also water; in addition there are of course the industries manufacturing the many types of machines using power. At the same time the production of power, formerly subsidiary to the enterprises using it, has become, in the dominant form of electricity, a separate industry of gigantic size. The fact that the capital invested in the electricity supply industry alone amounts in the United States to over \$12,000,000,000 and in Great Britain to more than £370,000,000 affords some conception of the importance of the power industries. The electric power industry ranks next to the railways in capitalization and constitutes the second largest industry in the leading industrial countries; if all the industries generating power or supplying the necessary fuels were combined, the aggregate capitalization would exceed that of the railroads.

Four periods may be distinguished in the evolution of industrial power. The first was coincident with man's struggle to rise above his environment and to create the conditions necessary to the evolution of some form of civilization. This period begins with the very early ages of civilization, when in addition to manual labor a successful attempt was made to harness animal power and apply energy, as yielded by the sun or water or by the combustion of fuel, to the immediate production of goods. Among the factors working toward the development of power was the discovery of the wheel, which is one of the earliest and most fundamental of technical developments (followed at some considerable distance by the elaboration of transmission methods, allowing one wheel to drive another wheel some distance away); the knowledge of differences of pressure, caused by the changing level of water; and the effect of differences in temperature, as applied to the working of metals. All the earliest civilizations—the Assyrian, the Egyptian, the Aegean and the Persian—had in common a fairly accurate knowledge of the use of water power. It was a condition of their existence that such knowledge should be applied immediately. The first real movement toward the exploitation of power was the development of irrigation along the Nile and the

Euphrates and in China, with its ancillary operations, such as water pumping and distribution; the use of the water wheel to carry out fundamental agricultural operations, such as milling; the providing of materials and equipment necessary to maintenance of life, for example, pottery, domestic appliances, agricultural implements and even armor. The Greeks of the Alexandrian period developed a miniature steam engine of a rudimentary kind, but the discovery was looked on as part of philosophic speculation and not as economic necessity, while the Romans had no genius for research or at least no clear perception of the direction or significance of the scientific investigations made by the Greeks.

The second stage was an expression of the emergence of capitalist industry and the capitalist spirit in the period of the Renaissance and of the Reformation; it came to a conclusion with the French Revolution, which may be regarded as the victory of the capitalist spirit—and all its implications in political and social change—over the spirit of feudalism and conservatism. During the whole of the feudal period there was no real demand for power in the mass, and there may be discerned only a beginning of the scientific approach to power both as a cultural and as an industrial problem. The researches carried out by the Greeks were completely unknown, since the great mass of Greek thought and literature had still to be discovered, and the mediaeval guilds were a poor substitute for the public corporations elaborated by the Romans; the great engineering and structural achievements of the Romans, all part of a policy of public works construction, had been allowed to fall to pieces. There was consequently no knowledge of the necessary engineering calculations and no memory of actual technique; while the predominance of mediaeval scholasticism, which began to lose its grip only with the discoveries of Galileo, made it quite certain that the spirit of inquiry, necessary to economic development and upon which in turn the development of power depended, would be stifled at birth.

As the Renaissance merged into the Reformation and capitalism acquired increasing ascendancy, a whole series of manufacturing industries came into existence in certain well defined regions, such as Lyons, Florence and Milan; and the spread of these industries to other countries, political and religious persecutions being among the contributing factors, brought with it the first main movement toward industrialization.

Although there were no changes in the sources and application of power, there was considerable technological development; machines, including pumping apparatus in mines, were becoming more numerous and heavier, creating the problem of more efficient forms of power. It was moreover essentially a time of speculation, research, inquiry and experiment, when a love of knowledge was conditioned by a desire to apply it to a practical purpose. At the end of the seventeenth century no state in Europe, within the limits of existing power resources, could be regarded as capable of meeting much longer the needs created by the rapidly increasing tempo of economic progress, by the fast multiplying demands made on industry and the social structure, by the widening extent of world communications, world trade and world finance. Economic and technological forces pressed toward the development of new forms of power.

The third stage is coincident with the discovery of steam as a prime factor in developing mechanical energy and in the invention of industrial machinery which could utilize the new form of energy. The industrial application of the high pressure steam engine, from the rudimentary product created by James Watt to the enormously powerful reciprocating engine capable of driving miles of shafting in a factory, resulted in a great development of the arts of engineering and machine construction and in an enormous expansion of the output and productivity of industry. The researches of Michael Faraday and his discovery of the principle underlying the electric generator led to the creation of fundamental industries producing mechanical and electrical energy in volume sufficient to supply very large industries. Further inventions relating to the transformation and transmission of energy widened the range of the earlier appliances. A new power age was definitely ushered in.

The fourth period in the development of industrial power dates from about 1880. At the beginning of this period the single prime mover of importance was the steam driven reciprocating engine; its application took innumerable forms both in industry and in transport, including shipping. While the steam engine had stimulated a great development of machinery, it now imposed limitations on the types and efficiency of machines and on factory organization. Between 1881 and 1890 this position was changed by the discovery of the steam turbine, by the invention and elaboration of the gas engine and

the resultant internal combustion engine using oil or gasoline, and by the application of all three engines—the steam turbine, the gas engine and the oil engine—to the generation of electricity.

These developments brought about a wide expansion of power production. Thus in the United States the capacity of all forms of prime mover rose from 10,000,000 horse power in 1849, of which work animals represented 7,747,000 horse power, or 76.9 percent, to 684,000,000 horse power in 1923, of which work animals accounted for 21,500,000 horse power, or 3.1 percent. Animal power fell from 25,262,000 horse power in 1909 to 21,500,000 horse power in 1923. Prime mover capacity in manufacturing rose from 1,100,000 horse power in 1849 to 19,728,000 horse power in 1923; in mines and quarries, from 50,000 to 5,000,000; in steam railways, from 435,000 to 74,600,000; in shipping, from 734,000 to 22,000,000. In 1923 automobiles accounted for 507,000,000 horse power, 53,724,000 being used in commercial automobiles.

The power structure of the contemporary world and its corresponding mechanical equipment are founded on the steam turbine, the internal combustion engine and electricity. The outstanding characteristic of these new prime movers is their capacity to generate power at a very much lower weight per unit of output than that of the reciprocating engine, and there is no apparent limit to the size of the engine itself. The reciprocating engine prior to 1880 had reached the highest standard of thermodynamic efficiency that could be expected with the knowledge of materials, temperatures and pressures prevailing at that time. As a matter of fact such improvement as did take place in the efficiency of the reciprocating engine was not strongly marked, while there was a very definite limitation as to size, because of the enormous masses of metal involved. It was only in marine propulsion that the very large reciprocating engine generating many thousands of horse power could be used. The new prime movers were free of these limitations. Thus the gas engine, which in the early 1880's reached the limit of 220 horse power, has been improved and extended so considerably that units have been installed of over 8000 horse power. The gasoline driven engine has not reached such very large capacities, because the tendency has been to reduce weight consistently for a given output and thus allow the engine to be used for purposes to which

other types of prime mover do not lend themselves; for example, airplane propulsion, high speed propulsion in small vessels and road transport over difficult areas. One elaboration of the internal combustion principle has been the Diesel engine for both land and marine purposes, and there is no immediate limitation to the capacity of the Diesel unit in power stations. Generating sets of 15,000 horse power and above are in commission. The thermodynamic efficiency of the gas engine and the internal combustion engine has been much higher than that of the reciprocating engine, resulting in a great economy of the fuels used to generate energy. It is in the steam turbine, however, that the most revolutionary changes have taken place. Through the exact study of temperatures, pressures, the behavior of materials under temperatures and pressures and through the selection of materials themselves it has been possible to achieve with the steam turbine results which were quite inconceivable in the early 1880's. Even until 1920 it was thought that the maximum limit of size of the steam turbine would be between 30,000 and 40,000 horse power, while for purposes of electrical generation about 15,000 horse power was considered a very large capacity; in 1932 the largest single turbine on order had a capacity of 200,000 horse power. The entire development has been toward realization of higher speeds, temperatures and pressures. The weight per effective horse power and the floor space required, if attention is confined to the largest turbines, was in 1933 less than one fifth what it had been in 1918. Thus a 60,000 horse power turbine in the later year occupied no more space than one of 12,000 horse power in 1918.

This movement toward higher units and higher thermodynamic efficiencies has been ac-

companied by more exact study of fuel economy and fairly rapid reduction in the consumption of coal; in other words, more successful methods have been found for extracting energy from a given amount of coal. In 1920, 3.5 pounds of coal were required to generate 1 kilowatt hour of electricity in central generating stations, whereas in 1929 only 1.9 pounds were needed. In each case the average consumption of coal for power production in steam generating stations in the United States and Great Britain has been taken. Coupled with this movement toward fuel economy has been the very rapid development of water power, particularly in the United States, Japan, New Zealand, Canada, Scandinavia and central and southern Europe. The output of hydroelectric water power in 1929, the year of maximum electrical development, was over 120,000,000,000 kilowatt hours, equivalent to the energy generated by 100,000,000 tons of coal in steam generating stations, while the world output of electrical energy was about 300,000,000,000 kilowatt hours. If the output from steam and fuel burning generating stations of the world, 180,000,000,000 kilowatt hours, had been produced with a fuel consumption of 3.5 pounds per kilowatt hour, as in 1920, the coal consumed would have amounted to about 282,000,000 long tons; but in 1929 the average fuel consumption was about 1.9 pounds of coal per kilowatt hour generated, and the world output required 152,000,000 tons—so that the combination of fuel economy and water power had cut down coal consumption by 230,000,000 tons a year. These figures are not given as absolute but merely as an indication of what is taking place in the power industries. In 1913, 88.5 percent of the world's production of power was supplied by coal; in 1931 the proportion had declined to 66.5 percent (Table I). Coal as

TABLE I
WORLD POWER PRODUCTION, 1913-31
(In 1,000,000,000 British thermal units)

SOURCE OF POWER	1913		1920		1925		1929		1931	
	AMOUNT	PER-CENTAGE	AMOUNT	PER-CENTAGE	AMOUNT	PER-CENTAGE	AMOUNT	PER-CENTAGE	AMOUNT	PER-CENTAGE
Coal*	36,236	88.5	35,209	82.1	36,130	75.5	40,580	71.2	32,530	66.5
Oil and gas	2,938	7.2	5,030	11.7	7,700	16.1	11,030	19.4	10,315	21.1
Water power	1,750	4.3	2,660	6.2	4,000	8.4	5,364	9.4	6,078	12.4
Total	40,924	100.0	42,899	100.0	47,830	100.0	56,974	100.0	48,923	100.0

* Including lignite, which contributed 3 percent in 1913, 3.4 percent in 1920, 3.6 percent in 1925, 3.7 percent in 1929 and 3.4 percent in 1931. (One kilowatt hour is equal to 3415 B. T. Us.)

Source: For 1913-25 see World Power Conference, International Executive Council, *Power Resources of the World* (London 1929) p. 79. For 1929 and 1931 computed by author on basis of statistics of production issued by the League of Nations.

such is becoming less and less important, along with the industries attached to it, while the process of substitution and elimination has gone so far that a new set of economic problems has come into existence. These problems affect the economic and social future of large parts of the world and some of its greatest industries. It is wrong, however, to assume that, measured on an effective energy basis, the power available from the combination of coal has declined. Progress in heat economy has been more rapid than the decline in world coal production. Even if in 1931 world coal output should have been, at 1,000,000,000 tons, only 70 percent of the 1913 total, the effective energy arising from it was very much greater.

The substitution of electrical energy for purely mechanical energy has resulted from technical change. It is difficult to give a statistical analysis of the conversion to electrification because of lack of adequate statistical data. It is known, however, that in 1930 of all the prime movers installed in industry in the United States 76 percent were devoted to the production of electricity; in Great Britain about 66 percent; in Germany about 64 percent; in Canada 86 percent; in France and Switzerland 90 percent; and in Italy 75 percent (Table II). For the principal

about 14,000,000 horse power. The justification for this change has been purely economic and has followed on technical development. The creation of very large units, with very high standards of thermodynamic efficiency, was possible only in conjunction with the production of electrical energy, since electrical energy easily lends itself to distribution over long distances and complicated areas and because the disappearance of the smaller units has led to greater and greater concentration on central generating stations.

A double movement can be traced: on the one hand, toward greater mechanization and use of power in industry and, on the other, toward the substitution of electrical generating plant for plant supplying mechanical energy directly. The capacity of all prime movers in Great Britain rose from 10,749,000 horse power in 1907 to 20,457,000 horse power in 1930; in the United States from 32,397,000 horse power in 1910 to 70,850,000 horse power in 1930; in France from 3,501,000 horse power in 1906 to 13,410,000 horse power in 1931; in Germany from 7,865,000 horse power in 1907 to about 27,500,000 horse power in 1931. In the principal industrial countries the increase in the capacity of all industrial prime movers was greater than the capacity of all installed prime movers in 1906-13, the capacity having more than doubled. The transition has been even more remarkable in countries which owe to the epoch following the World War much of their industrial development, as, for example, the British dominions, Italy, Japan, Argentina, Russia and Spain. Since 1924, as far as it is possible to judge, practically the entire productive capacity added to the prime mover plant in industry has been devoted to the generation of electricity.

In transport, on the other hand, this conversion has not taken place to any serious degree. Railway electrification has been carried out on a large scale in Switzerland, Italy, France (to a lesser extent), Austria, Hungary, south Germany, Spain, New Zealand and parts of South Africa. In the more developed industrial countries with large power resources, such as Great Britain and the United States, the tendency has been to electrify suburban lines only; but conversion, although delayed, is nevertheless taking place, and the modern swing toward large scale operation has caused executives to favor railway electrification. Thus the maximum capacity of high speed steam locomotives is about 2500 horse power, whereas an electric locomotive of

TABLE II
PRIME MOVER CAPACITY IN THE INDUSTRY OF VARIOUS COUNTRIES
(In 1000 horse power)

COUNTRY	YEAR	TOTAL PRIME MOVER CAPACITY	TOTAL CAPACITY OF PLANT GENERATING ELECTRICITY	PERCENTAGE OF PRIME MOVER CAPACITY
United States	1930	70,850	54,000	76
Germany	1931	27,500	17,500	64
Great Britain	1930	20,457	13,400	66
France	1931	13,410	11,940	89
Italy	1931	7,387	5,520	75
Canada	1931	6,764	5,800	86
Switzerland	1931	1,756	1,575	90

Source: Adapted by author from census figures and official returns. For Italy and Switzerland the census data of 1927 and 1929 respectively were supplemented by information as to later extensions of generating plant. For the United States see also Silver, A. E., "Operating Engineering Problems" in National Electric Light Association, *Bulletin*, vol. xix (1932) 467-72.

industrial countries taken in the aggregate the production of electricity accounted for the employment of about 70 percent of all prime movers installed, exclusive of those used in transport. The annual world rate of increase in electric generating plant before the crisis of 1930-33 was

less weight and greater elasticity of power has been designed for a capacity of 8000 horse power. In marine transport the shipping driven by reciprocating steam engines or by turbines driving the propeller shaft directly has constituted a steadily decreasing proportion of world shipping and now accounts for less than 90 per cent; but here again the introduction of turbo-electric drive in combination with reciprocating engines or without the latter has tended to bring back propulsion to the steam engine and to combine with such propulsion the generation of electricity.

While the position of industrial power at present is extremely complex, it is gradually becoming simpler and more clearly defined; and as a result of such definition there has been greater efficiency, better application of power to its essential use and a fairly steady reduction in the amount of fuel consumed.

The effect of this combination of increased mechanization and the use of electricity has been to produce basic transformations in a large number of industries. Not only has there been a change in the character of machines, but the labor force and factory organization have likewise been modified (*see* MACHINES AND TOOLS). The tendency of small industrial units to disappear has been stimulated as a result of centralization of power and its greater availability through widespread distribution systems. It is possible, however, to overestimate the importance of very large units. Thus in the United States there are over 200,000 factories using power in some form or other and in Great Britain more than 140,000, the statistics excluding in each case the basic industries of mining and quarrying. Again, in the power industries themselves the movement toward concentration has by no means reached its peak. In the United States there are about 4000 individual generating stations, quite apart from isolated units scattered throughout commerce, agriculture and mining; in Great Britain more than 3000; and in Germany at least 6600. But in these three countries fewer than 100 generating stations account for more than 80 per cent of the national output of electricity. The small unit in industry and in power, however, has shown an extraordinary capacity for resistance to change. This may be expected by reason of the fact that innumerable industries still retain purely local application and definition.

While the development of electricity as the dominant form of power has been accompanied

by increasing industrial concentration and urbanization, there are some indications of development in the opposite direction. Steam power necessarily meant the geographic concentration of industry, adjacent to coal regions; and it was conducive also to the overrapid growth of cities. Electric power, because of long distance transmission, can become a potent force for the geographic decentralization of industry and its more even distribution, a development already manifest in many regions and countries. This and the advent of new methods of transportation based on the oil engine may help to check the spread of excessively large cities. At the same time, although the generation of electricity is dependent on giant plants, electric power and the type of machine it can serve also make possible a large amount of technological and economic decentralization of industry. While it must be admitted that these aspects of electric power are thus far more latent than actual, certain industries, such as pottery, woodworking, textiles and paper making in its finer stages, have not been destroyed entirely by large manufacturing units with national marketing systems. In some respects in fact the new developments encourage, from the purely technological angle, the persistence and development of small scale industry. Electricity and the internal combustion engine with its high standard of operating efficiency have enabled the rural industry to increase its output, standardize its product and cut down cost at the same time; and in many areas distant from centers of population, these industries have shown a marked tendency to increase rather than to decline. Mechanization has spread also to farming operations, largely through the use of the internal combustion engine for outdoor farming and of the electric drive for all other operations. There has been a very large increase in production, so large indeed that during the world crisis the basic agricultural products, influenced most of all by mechanization, were a glut on the market.

The new power age has caused important economic changes. It has led to the development of the power industry as the greatest single industry after the railways in the modern economy. Through the process of technical change it has brought about the concentration of power producing units in very large centers of production. In order to take advantage of technical progress it has intensified the development of a system of very large scale production, which has extended to every industry of importance; and

although possibly this has been overdone in some cases, the only real exception is the small rural industries with local markets, which have the widespread distribution of electric energy to improve their competitive position. This new power age has resulted in a considerable displacement of labor as between one group of industries and another. In basic industries, such as coal, iron and steel, shipbuilding, agriculture and chemical manufacture, the introduction of power into every operation has increased output and displaced labor. In the manufacture of articles for general consumption, for example, in the textile, paper, woodworking, rubber, brewing and milling industries, the increase in power facilities has not so much intensified the movement toward mechanization, since all of these industries had already been mechanized as far as possible, as it has improved efficiency in production and consequently led to a rapid fall in price. In some of the industries producing consumption goods, above all in textiles, the emphasis has been on design and quality to insure continual stimulation of consumers' demand. The power age has given new prominence also to the industries supplying the material for power equipment and power production, for example, the manufacture of electrical equipment and machine tools, light engineering, automobile engineering, light steel and industrial textiles; and, finally, through the progress of scientific and technical research it has disclosed a whole series of new requirements, particularly in amusement and transportation, which were unknown before and which in the majority of cases are linked up with the production and utilization of power machinery.

Power development in the whole period since 1890 has caused emphasis to be placed on capital investment and on the production of capital goods, since it has necessitated an entirely new equipment in the main producing industries. The application of investment to the new power industries has introduced new forms of corporation and public financing, while the rapid growth of the power industry itself has entailed new methods of control in order that the public interest might be protected (*see PUBLIC UTILITIES*). The electric holding company, for example, as in the United States or in Italy, can control the destinies of companies supplying as much as 25 percent of the national production of electricity and in addition has been able to form international affiliations with a view to securing similar control in other countries, particularly

in the Far East and in Latin America. In recent years there has been a marked tendency for a special type of financial institution, associated with important banks, to enter more and more fully into the public utility field and in this way to set up extremely complicated commercial and trading relationships. The development of holding companies to obtain financial control over operating companies has proceeded so far that the public has ceased to have any real control over the direction and cost of the services supplied by such companies. In many countries the problem of supervision is being tackled, as far as production and main transmission of electricity are concerned; the tendency is to subject the new public utilities to much the same type of legal control as that over railways and concerns which are developing water power resources.

It is too early even now to determine what will happen as a result of this change, just as it is difficult to make any estimate of the realignment which may take place in the industrial geography of the world. It is common knowledge that the exploitation of water power has allowed new countries to become industrialized with very great rapidity, particularly Japan, France, Italy, Switzerland, Austria, Scandinavia, Chile and other Latin American countries, New Zealand, Canada, southern Germany, the southern states of the United States and outlying areas in India. The industrialization of these countries has caused a change in the distribution of world trade; there has been a decline in the consumption of coal from predominantly coal exporting countries, like Great Britain, while their industrial development has moved toward industries producing power equipment, so that international competition has borne very heavily on what are generally regarded as the new industries. There can thus be observed some movement toward equalization of economic effort as between one group of countries and another, but this equalization has not proceeded very far and has not been such as to open up world markets, outside of the United States and possibly Canada.

There may be a time subsequent to the present period of adjustment when the combination of power with the proper study, control and utilization of natural resources will lead to very rapid economic expansion in the principal countries of the world and through them in the world as a whole. Power consumption is still greatest in the four major industrial nations, and even

TABLE III
POWER CONSUMPTION IN VARIOUS COUNTRIES,
1925-31*
(In 1000 long tons of coal)

YEAR	UNITED STATES	GREAT BRITAIN	GERMANY	FRANCE	TOTAL
1925	681,426	179,244	156,271	72,221	1,089,162
1927	730,125	192,122	163,332	79,085	1,164,664
1929	781,859	186,658	180,331	87,422	1,236,270
1930	694,467	181,449	155,918	90,168	1,122,002
1931	602,644	169,387	130,101	83,628	985,760

*The basic data include net consumption (production plus imports minus exports) of coal, oil, water power in electric generation and, in the United States, production of natural gas. Conversion to a coal basis is on the assumption that 1 ton of oil = 1.495 tons of coal; 1 cubic meter of natural gas = 3.13 pounds of coal; and that the water power required to generate 1 kilowatt hour = the average amount of coal required to generate 1 kilowatt hour in electric generating stations in Great Britain, i.e. 2.40 pounds in 1925, 2.16 in 1927, 1.97 in 1929, 1.90 in 1930 and 1.82 in 1931.

among them it is unequal (Table III). Many countries at present are necessarily limited in their output and consumption of power because of insufficiency of the fuels now utilized in power production. Despite a number of experiments in the harnessing of new sources of power, such as thermal energy from the ocean on the equator; the use of vegetable liquid fuels, such as alcohol for power production; and the careful study of solar radiation, no serious increment in power capacity can be expected from such sources within any appreciable time. On the other hand, suitable research as to the use of tidal waters would tend to show that the tides can be used, provided engineering technique can design the proper machinery. At the present time there appears to be no physical impossibility, but the required capital investment is so high and the resultant cost so great that such means would be resorted to only in the event of a power scarcity; such scarcity would occur as a result of exhaustion of fuel and oil resources, and there is no indication yet of such exhaustion. A number of countries with no water power and no fuel may well study the possibility of tidal power, but transport charges have become so low that energy generated by imported fuel would probably compete with energy generated locally through tidal power.

In the future the expansion of power networks may be expected to cover whole countries, such as Great Britain, Germany or France, or groups of states, as in the United States. There is likely to be imposition of state supervision or control over such networks, coupled with the rapid decline in cost of power in industry, transport and agriculture. New centers of economic activity may be anticipated, particularly in rural

areas; while the availability of power in small bulk, particularly electricity, may be expected to change the habits of the people. The electrification of domestic processes, resulting as it does in greater leisure, will exert its maximum effect when society itself begins to develop an organization to control important services with a view to the most widespread national requirements. The task of the future will be found not so much in the development or the utilization of power as in the study of the adjustments which must be effected in social relationships so that economic effort may be enlisted in the service of social utility.

HUGH QUIGLEY

See: TECHNOLOGY; MACHINES AND TOOLS; ELECTRIC POWER; COAL INDUSTRY; GAS INDUSTRY; OIL INDUSTRY; NATURAL RESOURCES; LOCATION OF INDUSTRY; PUBLIC UTILITIES; LARGE SCALE PRODUCTION; INDUSTRIAL REVOLUTION; INDUSTRIALISM; CAPITALISM.

Consult: Keir, R. Malcolm, *Manufacturing* (New York 1928) ch. iii; Hirschfeld, C. F., "Power" in *Toward Civilization*, ed. by Charles A. Beard (New York 1930) ch. iv; Daugherty, C. R., Horton, A. H., and Davenport, R. W., *Power Capacity and Production in the United States*, United States Geological Survey, Water-Supply Paper, no. 579 (Washington 1928); Daugherty, C. R., "Horsepower Equipment in the United States, 1869-1929" in *American Economic Review*, vol. xxiii (1933) 428-40; Olphe-Galliard, G., *La force motrice au point de vue économique et social* (Paris 1915); Huber, Michel, "La statistique des forces motrices" in *Société de Statistique de Paris, Journal*, vol. lxxiii (1932) 397-422; Heys, J. W. van, "Welt-Kraft" in *Technik und Wirtschaft*, vol. xvii (1924) 229-40, 257-61; Leisse, Wilhelm, *Die Energie-wirtschaft der Welt in Zahlen*, Vierteljahrshefte zur Konjunkturforschung, Sonderheft 19 (Berlin 1930); Osborne, A. A., "Power Using Industries of Italy," United States, Bureau of Foreign and Domestic Commerce, *Trade Information Bulletin*, no. 772 (1931); World Power Conference, First, London, 1924, *Transactions*, 5 vols. (London 1925), and World Power Conference, Second, Berlin, 1930, *Gesamtbbericht: Transactions*, 20 vols. (Berlin 1930-31); World Power Conference, International Executive Council, *Power Resources of the World* (London 1929); Murray, W. S., *Superpower* (New York 1925); Fairgrieve, James, *Geography and World Power* (London 1915); Thorp, W. L., *The Integration of Industrial Operation*, United States, Bureau of the Census, *Census Monographs*, no. 3 (1924); Henderson, Fred, *The Economic Consequences of Power Production* (London 1931); "Public Control of Power," ed. by P. T. Moon in *Academy of Political Science, Proceedings*, vol. xiv (1930-32) 1-210. Consult also bibliographies on MACHINES AND TOOLS, ELECTRIC POWER, PUBLIC UTILITIES.

POWER, POLITICAL. Despite the diversity of processes subsumed under the general category "political," it is possible to detect a com-

testimony to the political effectiveness of military power.

Nevertheless, the power of the soldiery finds no permanent institutional expression. The ancient praetorians asserted vague claims to a constitutional right of electing emperors; military juntas have governed briefly in South America. But the ultimate result has always been the installation of a new emperor or president rather than the creation of a formal military oligarchy. Once raised to the pinnacle of power, however, the most devoted military partisan, aware at once of his insecurity and of his opportunities, tends to seek political independence of the military. The latter, still institutionally powerless, can reassert themselves only by a fresh resort to force. Consequently praetorianism results in a recurring series of rebellions. An external force is needed to break the vicious cycle. Sometimes, as in the case of the Chilean gentry under Portales, aroused elements of the nation may intervene to reestablish order. More frequently a dictator, himself perhaps a creature of praetorians, succeeds in crushing the army and in establishing a personal absolutism. The consummate statecraft of such figures as Díaz of Mexico has often provided long periods of peaceful development, during which lasting progress has been made toward the attainment of the social prerequisites of political stability. In South American history is found general confirmation of Machiavelli's opinion that an individual of outstanding *virtù* is needed to achieve the reformation of a state.

FREDERICK MUNDELL WATKINS

See: MILITARISM; OLIGARCHY; DICTATORSHIP; REVOLUTION AND COUNTER-REVOLUTION; CONSPIRACY, POLITICAL; EMPIRE; FORCE, POLITICAL; VIOLENCE.

Consult: Suckert, Curzio (Malaparte), *Coup d'état, the Technique of Revolution* (New York 1932); Gibbon, E., *The Decline and Fall of the Roman Empire*, new ed. by J. B. Bury, 7 vols. (London 1923-25) vol. i; Firth, C. H., *Cromwell's Army* (London 1902) ch. xiv; García Calderón, F., "Dictatorship and Democracy in Latin America" in *Foreign Affairs*, vol. iii (1924-25) 459-77, and *Latin America: Its Rise and Progress* (New York 1913); Beals, C., *Mexico, an Interpretation* (New York 1923) ch. xiv; Jane, L. C., *Liberty and Despotism in Spanish America* (Oxford 1929); Arguedas, Alcides, *Historia general de Bolivia . . . 1809-1921* (La Paz 1922); Dawson, T. C., *The South American Republics*, 2 vols. (New York 1903-04); Callcott, W. H., *Liberalism in Mexico, 1857-1929* (Stanford University 1931).

PRAGMATISM. Like many other philosophic labels, pragmatism denotes more an attitude of mind than a system of ideas; it is applied to

many different, and often conflicting, systems. All such systems, however, have in common certain fundamentals, such as the plurality and diversity of things and thoughts, the primacy of change, movement and activity, the genuineness of novelty and belief in immediate experience as the court of last resort in validating ideas. In accounting for the differences between true and false, right and wrong, good and bad, beautiful and ugly, they may be said to employ the Darwinian notions of spontaneous variation and the struggle for survival.

The intellectual climate into which this pragmatic attitude was born may be characterized in Santayana's apt phrase as "the genteel tradition." The differentiating sources of this tradition are to be found in Calvinism. Its view of man and nature is monistic. It regards the universe as a single block, the nature of whose every part is determined by its place and relationships within the whole. It assumes for each man, each thing, each thought a predestined history and fate. Although Calvin had made this predestination dual, dividing all mankind into the eternally elect and the eternally damned, the notion of eternal damnation has fallen into disuse. Today there is a very widespread consensus among the heirs of Calvinism that man is fore-ordained only to a happy ending in a good life in eternity. The paramount spokesman for this faith was Ralph Waldo Emerson. The difference between him and Jonathan Edwards is a difference made mostly by the American scene and a little by Germanic transcendentalism. The high point of this doctrine is reached in urban America, and its attainment goes with the use and spread of the comforts and culture of city life.

On the countryside the Calvinism of the fathers underwent another sort of change. The countryside was first and last wilderness and frontier. Those who dwelt in it or wandered over it were pioneers gambling with the uncertainties of climate, soil, animals and Indians, risking their lives and fortunes on an unknown future. For these actual risks the certainties of Calvinistic predestination could serve only as imaginative compensations. Pioneer life dissolved the inevitabilities of the genteel tradition into the chances and changes of the struggle for existence in the wilderness. With them were worn down all the fixed orders of inherited caste and custom. Achievement replaced status as the measure of value. Rank and birth gave way to works. Men ceased to be born good, they "made

good." That pregnant Americanism tells the story. It shows that considerations of the past have given way to creations of the future, that what is from day to day vital to Americans is not established order, routine and finality, but initiative, enterprise, innovation, and that these are judged not by their premises but by their consequences.

Industry exhibits an analogous transformation of mood. Its captains, of course, risked not so much their lives as their fortunes. But its rank and file, who filled the textile factories, laid the railroads, dug the ores and smelted the metals, came first adventuring from the countryside, with the habit of initiative and experiment strong in them. Later they were partly pushed upward and largely supplemented by immigrants from all Europe. But in these the pioneer mood was set up by the very act of migration, which imposed innovation and adventure among the new conditions of a new life. Thus industrial enterprise in America elicited, from both native and immigrant whites, attitudes, qualities and valuations like those of the wilderness. The mood was continental.

When the American mood became aware of itself and sought to define its inward quality and direction there was nothing in the genteel tradition which it could employ. Emerson, when he was most American, was least traditional; Whitman could speak at best of "democratic vistas." The theme needed another language. This was derived for it first from the victory of Darwinism, with its vision of so many novelties entering a world not made for them, struggling for their lives in it and winning the struggle by the workings of their organs and ideas upon the recalcitrant world, by their "making good." The new language came, secondly, out of the sciences, out of an analysis of their method and logic. This analysis tended, from Mill's day on, to maintain the thesis that "laws of nature," the concept of classes, of genera, of species and other general ideas depend for their validity on verification by piecemeal experiments, each yielding a concrete, specific, sensory experience.

The coming together of the American mood with an interest in the logic of scientific method had the effect of standing the traditional philosophic conclusions on their heads. Multitude and variety of existence were asserted against the traditional organic unity and homogeneity; immediate experience of terms and relations was exalted over the traditional sheer rationality.

Time and change were treated as elemental and primary; eternity was treated as an empty concept; chance was put above necessity. Rationality itself was reduced to familiarity, convenience or some other mode of adjusting the vital economy. In sum, empiricism, pluralism and temporalism were recognized as possessing a congruity with our day to day experiences of both theory and practise which the genteel tradition, however Hegelianized, entirely lacked, inasmuch as its function with respect to these experiences was equilibrating and compensatory, not vital and programmatic; its monism, necessitarianism and optimism merely projected beyond experience the determination of the effortful will which was making good its way within experience. Although, as in Emerson's case, the tradition was sometimes invoked in behalf of freedom, for the most part it was used as a guaranty of the status quo. Great landlords, captains of industry or of finance, invoked it chiefly to justify their overlordship when that was challenged or to vindicate both chattel and wage slavery.

But the foremost conscious concern of the professional spokesmen for the genteel tradition lay outside the social scene. It lay in the challenge of the sciences. This challenge had various forms. One was rigid and intransigent. Like the young Hegelians, philosophers of science were likely to reply to the idealistic dogmatism of the genteel tradition with a harder materialistic dogmatism of their own, crying "matter, matter," where the tradition cried "mind" or its equivalents. On the other hand, others who were analyzing the daily procedure of the sciences regarded such mind and matter as hypotheses by no means proved in experience. Thus, to the Germanic physicist Mach, physics and psychology have the same subject-matter and are alike to be handled by the methods of science. These methods, he pointed out, are rules of thought's economy, born of "our psychological need to find our way in nature" and functioning to formulate ideas which summarize and anticipate experience so that we may control it. The structure, precision and consistency we give such ideas do not pertain to experience. We manage phenomena by their means, but cannot discover what lies beyond them. Science, Mach concludes, is no revelation of nature; it is only a device for handling her. The French mathematician, Henri Poincaré, comes to an analogous conclusion. Experience, he finds, is rich, multiple, varied and changing. Our imagination

plays on it; fixes, with a sort of direct intuition, upon some one of its innumerable qualities or relations and on it builds up a system. The system is neither a priori nor inevitable; it has numberless alternatives. Should it prevail among scientists, it would do so only because it serves their convenience, because it enables them more successfully than its current rivals to handle facts. In this success its truth consists. If need be, however, it can be translated into another, and even contrasting theory, applicable to the same facts; a theory is preferred over an alternative one because it is simpler and more convenient when judged by its experiential consequences. The American scientist and logician, Charles Peirce, also came to conclusions like these. The conception of any given object, he showed, can consist of nothing else than its anticipated consequences. These are necessarily sensory, and guide conduct by determining our future attitudes and action. Conceptions are systems of expectation and plans of action which arise out of sensory experience and lead back into it and cannot pass beyond it.

On the whole, such analyses of the methods of the sciences as those of Mach, Poincaré and Peirce make for a relaxation of dogma, for skepticism and agnosticism. Concerning metaphysical ultimacies scientists more and more abandoned "I know" for "I don't know; I suppose." Among the spokesmen of the genteel tradition a similar relaxation of dogmatism was to be observed. The infallible certainties of revelation gave way to the vaguer assurances of dialectics. Here also a certain skepticism was manifest. Revealed truth became merely projected belief. F. H. Bradley was a foremost voice of this mood in England, Vaihinger in Germany, while among the French Renouvier's exaltation of faith without dogma—fideism they called it—directly influenced William James. The general maxim was "I don't know; I believe."

Fideism and agnosticism are the consequences of the impact of science on religion and of religion on science. Pragmatism may be said to have been born in the mind of William James as a consequence of this impact. James grew up in the atmosphere of the genteel tradition, but he early became convinced of scientific determinism. The clash between these two ideologies became the surrogate for a deep inner conflict and anxiety, which were resolved when he applied Renouvier's teaching to his own life. He willed to believe in free will and trusted the validation of this belief to its consequences.

The attitude that was thus formed was the initiation of James' pragmatism. It absorbed and transformed what James had learned from Peirce. It directed James' sensibilities toward the unconventional, the new, the marginal and anarchic in experience; it fixed his sympathies with the individualism, the equalitarianism, the adventure, the struggle, the risk and the innovative remaking of the American scene. Hence he viewed life and mind as streams of effort, of constant choosing between alternatives, of constant struggle to make the choice good by its consequences. As the consequences fall out, he observed, so things are judged—true, false; good, evil; right, wrong; beautiful, ugly. Such judgments are retrospective, not prospective, and they apply as well to all the establishments of civilization as to events in a biography. Law, religion, government, art, science or what you will receive meaning and value not from what they are but from what they accomplish. They are neither the first things of life nor the last; they are only its ways and means.

James' teachings make paramount the functional nature of mental activity and the instrumental character of knowledge. The extension of this philosophy to the analysis and interpretation of social institutions and to the redefinition and redirection of education was the work of his younger contemporary, John Dewey, who brought in the term instrumentalism as the synonym for pragmatism. James' world, especially his intellectual world, had been European as much as American. Dewey's was all American. From the Vermont hill town of his youth his work took him to the busy cities of the midwest plain. He saw the machine economy grow up and transform its agricultural predecessor and he was sensitive to it as James was not. A convert to Hegelianism, which brought him the vision of a hitherto missed unity in his ideas of the self and of the world, and a convert to James' functionalism, which gave concreteness and substance to the unity, Dewey realized men and events as a continuing process "of communication and participation" between each and all. He redefined thinking and knowing as a sort of instrumentation by which blocked movement, thwarted activity, balked will, overcame their obstructions and again flowed free. Ideas, it followed, were in nature active organs and instruments of integration, continuity and survival. Especially are they such, Dewey found, in education, which focalizes upon the growing human his available social inheritance and is

thus the most naturally potent organization of "communication and participation."

In England the Oxonian Schiller, also under the influence of James, worked out a theory of life which he then called humanism and now calls voluntarism. Beginning in a primeval protoplasmic will, the human psyche develops by postulating the satisfaction of a need as a quality of the external world. Every axiom began as such a postulate and the whole dynamics not only of human thought and human conduct but of the worlds of history and of nature are the creations and recreations of this postulative activity. To Schiller man was the starting point and the goal of all experience and the measure of all things.

Now experiences are manifold, inwardly diversified and outwardly changing. Obviously no one view of their basis, character and function could be more than a way of seeing them, of controlling and interpreting them. A system of metaphysics is no less an instrument of adjustment and control than a spade or a harness. As the history of philosophy well attests, to set up a system as final, unchanging, eternally valid, is to destroy its value as a tool, to denature it into an idol and to open the way for its competitors. The recognition of this fact constitutes the essential metaphysic of pragmatism. It points out that all systems of ideas, metaphysical and non-metaphysical alike, are relative to the situations in which they arise and the personalities they satisfy, and are subject to continuous verification by consequences. For Schiller a certain personalism or spiritism is basic; for Dewey the central thing is a split or conflict in experience which presents a problem and requires integration and unification; for James it is the radical empiricism which declares that the relations of things are as real and as immediate as the things themselves. Some thinkers with pragmatic leanings, like Ostwald, make their metaphysical ultimate an amorphous energy subject to control and transformation by means of mathematics. Others, like Papini in one of his early manic states, make it a sort of theosophic personalism. Still others, like Edward Scribner Ames and the religious humanists, tend to make their conclusion a philosophic depersonalization of the god both of theology and of mystical experience into "the highest social ideals" and to conform it, as Dewey suggests, to the "current intellectually acceptable beliefs."

Pragmatism has had its richest effect on education. It is not too much to say that educational

practise and theory in the United States, in Russia, in Mexico, in Turkey derive from John Dewey. Moderns owe to Dewey the stress on the child as a growing, changing personality, on the school as an instrument to facilitate this growth and change, on teaching and learning as processes of communication and participation whereby the child appropriates and assimilates the past and creates the future. From Dewey and his followers also flows a pragmatic influence on politics which has its high point in the principles and the program of the progressive movement, through which it also enters legislation and administration of the law. Indeed since 1910 it has not been uncommon to find reference to James, Dewey or other pragmatists in judicial decisions of state and national courts, including the Supreme Court of the United States.

The influence of pragmatism on the social sciences is yet too early to measure. It shows itself chiefly in the decline of sociological dogmatism and the growing refusal to accept as final and definitive either the quantitative or descriptive treatment of "facts" or the deductive handling of social theories. The pragmatic attitude in the social sciences indentifies itself with the determined use of scientific method, and to pragmatists scientific method here includes: the continuous discrimination and analysis of problematic situations; the invention and the candid and sympathetic consideration of alternative hypotheses and programs to resolve the problems; the verification of these alternatives by direct testing and experiment. This method pragmatists extend to established institutions as well as to new conditions. Family, state, church, industry, art or science—all are considered as instrumentalities to be judged by their consequences. The pragmatist in the social sciences therefore cultivates a skepticism of the instrument and is ever watchful against its hypostasis, or conversion from a tool into an idol.

By and large, pragmatism has never had a widespread acceptance among either academic philosophers or the philosophic public. Its rejection seems due to the fact that men in any walk of life whatever require of their philosophies that they shall be closed systems establishing once and for all the ultimate nature and destiny of man and of the universe. This the genteel tradition in its various forms does, and it continues to prevail among academic philosophers. It is supported moreover by the vested interests of the ecclesiastical and industrial es-

tablishments. Among the philosophic public, especially the rebellious portion of it, and among the natural scientists who deal directly with the stuffs of nature and are not troubled by problems of the logic of assumptions and methods, the prevailing philosophic dogma is materialism—either in the form of Marxist dialectic or of mathematical physics. To these also pragmatism is too tentative, pluralistic, temporal and relativist. It can offer struggle and hope, courage and belief at one's own risk, but it cannot offer either instant assurance or ultimate consolation; it cannot insure certainty. Vision of life born of the union of an insight into scientific method with the mood of a democratic social experience, of an adventure which has lapsed, pragmatism remains too difficult a rule of conduct for many to live by. Although it is an unconscious component of the general common sense, only a prolonged and assiduous realization of the nature of scientific method, coupled with the renewal, amid the establishments of the industrial economy, of the pioneer spirit and democratic purposes of early America, could maintain pragmatism as a consciously held philosophy of the multitudes.

Even if this should be desirable, it is unlikely to be attained. For not only are the conditions lacking in the trends of social life, but pragmatism itself is antagonistic to it. A widely accepted philosophy consists of dogmas held as eternal and necessary verities. Pragmatism dissolves dogmas into beliefs, eternities and necessities into change and chance, conclusions and finalities into processes. But men have invented philosophy precisely because they find change, chance and process too much for them, and desire infallible security and certainty. Pragmatism is no philosophy for them. It calls for too complete a disillusion.

HORACE M. KALLEN

See: PHILOSOPHY; LOGIC; SCIENCE; ETHICS; RATIONALISM; IDEALISM; NATURALISM; REALISM; FUNCTIONALISM; HUMANITARIANISM; POSITIVISM; PLURALISM.

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PRATO, GIUSEPPE (1873-1928), Italian economist and historian. Prato belonged to the group of scholars trained in the rigid scientific atmosphere cultivated in the 1890's by Cognetti de Martiis in the institute of economics of Turin University. After some excursions in the problem of Italian emigration, which was much debated in Italy at the time, Prato turned to the study of economic history and soon gained a reputation as one of the foremost Italian economic historians. His numerous studies on the economic development of Piedmont, which constituted his chief interest, are masterpieces of scientific research. He did not subscribe to the materialistic interpretation of history, nor did he aim to reconstruct economics through history; he was simply an economist who studied economic history and achieved lasting results. Marcel Marion, in prefacing a volume in honor of Prato, ranked him with Fustel de Coulanges, Levasseur and Lavissee; only the limited knowledge abroad of the language in which he wrote set bounds to the fame to which he was entitled.

Prato was keenly interested in current economic problems; he wrote with prophetic insight on the need for the protection of labor, before the exclusion of foreign labor became common all over the world; he subjected to a critical analysis the problem of collective bar-

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PRESSURES, SOCIAL. The term social pressure, in the singular, is sometimes applied to the constraint of the social order on the organic or native impulses of man, which are variously represented as being inhibited or balked or "sublimated" or at least diverted, by the compulsion of the mores and the necessities of social organization, into new channels dissociated from the biological drives. This general point of view is common to various psychiatric schools and has inspired certain theories of the nature of society (see, for example, Burrow, Trigant, *The Social Basis of Consciousness*, New York 1927; and "Social Images versus Reality" in *Journal of Abnormal Psychology*, vol. xix, 1924-25, p. 230-35). Such modern theories are logically the successors of the social philosophies which opposed society to nature, prevalent from the time of the sophists and running through the social contract doctrine and other forms of individualism down to the current protests against the standardization of behavior and of individuality attributed to the machine age.

When used in the plural, however, the term has acquired a more specific sense. Beyond the range of direct authoritarian controls, effected through officials or other accredited social agents and expressive of established codes, there exist socially created constraints which emanate from less sanctioned or less responsible sources; informal and opportunistic in their operation, they fluctuate incessantly in intensity and direction. These constraints may be called social pressures.

A distinction may be drawn here between mass social pressures directed against minorities which do not conform to the demands of a dominating and emotionally charged popular movement and group social pressures emanating from particularist groups which seek to advance their interests through activities intended to restrain or divert the behavior of resistant elements. The former type would be exemplified by the unofficial coercions characteristic of the earlier stages of the Nazi campaign or by the ostracism of those who trade, intermarry or otherwise enter into relations with members of a group exposed to the hostile attitude of a dominant religious, racial, nationalist movement; the latter by the attempts of blocs or of business interests to induce favorable conditions by tactics which bring to bear at individual points the power of wealth, organization, power or position.

The distinguishing fact about social pressures is that they depend generally upon informal even if concerted tactics and that they operate directly against non-conforming individuals. One aspect of this fact is brought out in R. E. Park's comment: "The pressure group is not an army which seeks to win battles by frontal attacks on hostile positions; it is, rather, a body of sharp-shooters which picks off its enemies one by one." This statement, however, is more applicable to the second type of pressure group referred to above. Mass pressures do indeed operate at individual points but they also exercise a broad restraining influence on the opposing front. What characterizes both types is the informal, opportunistic, extralegal nature of the coercive tactics they employ. Social pressures are thus to be distinguished not only from authoritative controls but also from the regular processes of indoctrination and habituation to which the established mores of every group subject its members. They belong to an unstable condition of movement and of strife.

The relation of social pressures to authoritarian controls, on the one hand, and to the established mores of the society within which they are exercised, on the other, may assume a considerable variety of forms. Because of the element of coercion inherent in these pressures the former relation is of primary importance in determining both the varieties and the techniques of pressure tactics. Social pressures may be exerted by means which are legally permitted or by methods which the law forbids, or again not only the methods but also the objectives may

be opposed by the law. There is a distinction, for example, between the pressures which employ certain techniques of "unfair" competition banned by the law and the pressures directed against the law itself or its administration, such as the relatively successful attempts to defeat or nullify the Volstead Act. For all types of pressure it is obvious that the attitude of governmental agencies is of vast significance. Even for the large category of social pressures which do not directly clash with the laws a generally favorable or unfavorable attitude on the part of authority is an important limiting or releasing factor. This is true not only because social pressures, being usually expansive, tend to reach or pass the margin where they may be interpreted as contravening the law but also because the activity of lawmaking may be turned, as in the case of the boycott, against the exercise of the social pressure.

The significance of governmental attitudes toward social pressures becomes more apparent when it is realized that the administration of legal justice is itself subject to the constant impact of social pressures. These may seek to extend or limit the interpretation or application of the law, as in the Scopes trial; they may demand severity or lenience outside of judicial or equitable considerations, as in indictments for certain types of sexual offense or in the trial of certain types of offenders, from Negroes to business magnates; they may even obstruct the regular machinery of jurisdiction, as evidenced by the popular antagonism which made German lawyers reluctant to defend the Communists accused of the burning of the Reichstag building or as expressed in the boycott of the lawyer who defended Sacco and Vanzetti. On a smaller scale social pressures operate to limit arrests or convictions for petty violations of the law or for infringements of outmoded laws, which thus fall into desuetude.

At one end of the scale of relations between social pressures and authoritarian controls is the situation in which the extralegal pressures proceed from the authorities themselves. This situation is frequent under so-called dictatorial governments, where the executive dominates the legislative and judicial powers. Under democratic conditions is found the intermediate situation, in which governments or officials cooperate actively with particular pressure groups; in adding, for example, extralegal to legal trade restrictions or in supporting campaigns to give preference to domestic products. Another aspect

of this situation is illustrated by the alliance of political authorities with militant religious groups, so evident throughout the history of religious persecution and still occurring in minor forms, as in the treatment meted out by the New York City officials to Mrs. Margaret Sanger in her campaign for birth control. At the other end of the scale belong those cases where the authorities actively resist the social pressures or where the pressures are directed against the authorities themselves. This can occur on a small scale, as in movements against individual officials, such as magistrates or judges, or on a large scale, as when mass pressure is directed against the prevailing system of authority. The latter is illustrated by nationalistic movements, such as that represented by the Indian swaraj or by the Irish "home rule" agitation; but it appears also in non-revolutionary forms, as when an unpopular tax proposal is withdrawn by a government under indications of public resentment or when an unpopular government, under the parliamentary system, resigns from office apart from any constitutional necessity.

The foregoing cases reveal more particularly a quality inherent in some degree in all social pressures—their dynamic relation to the existing social structure. Like Hobbes' liberty they appear in the "interstices of law." They impinge restlessly upon the law-established order, sometimes supplementing it, sometimes limiting it and occasionally undermining it or even seeking to overthrow it. The conservative function is seen in the drives made against the disturbers of tradition or the prophets of a new order. Social pressures are directed against them, whether they occupy pulpits or university chairs or, more rarely, seats on the judicial bench or whether they merely stand on soap boxes in the public parks. The limiting function is seen in the way in which legal liberties are curtailed by economic impacts, as when advertising interests intervene to effect the inclusion or exclusion of news in the press. The revolutionary function appears particularly in those social pressures which are generated or accentuated by wars and economic crises, ranging from concerted resistance to the payment of taxes or the collection of debts to the great historical upheavals which overturn states.

For the same reason social pressures are specially brought to bear wherever a social order is in the making or when, for whatever reason, it is not adequately protected by law. This situation occurs, for example, where an alien

group, with prestige but without legal authority, exploits a "backward people." Again, in the absence of an authoritative international code pressure methods are resorted to in order to render effective the existing international mechanism of the League of Nations. These may operate as disguised or overt economic inducements or through the stimulation of public opinion in other countries, and if possible in the recalcitrant country, against the governmental policy detrimental to the functioning of the League. The barriers which political boundaries present to the permeation of opinion making influences set rather definite limits to the use of the latter method.

The relation of social pressures to the mores, the social as distinct from the legal codes, is also highly significant. Some of the cases cited above belong to situations where there is a clash between mores and laws. In such situations the mores, restrained in their operation, generate social pressures which bear on the authorities whose duty it is to administer or execute the laws. Normally, because of the diverse mores of groups bound within the same legal system, there is an unstable play of pressures and counter pressures. An illustration is offered by the history of the administration of the Volstead Act. More permanently the condition occurs in the struggle of economic groups which employ their various extralegal weapons for pressure purposes. In general it may be said that wherever groups are pitted against one another in any kind of struggle, whether they be class groups, race groups, religious or other cultural groups, there is resort to the techniques of social pressure.

When the mores rally strongly to the side of a pressure group and when at the same time the latter is able to control the governmental system, the tactics of pressure become irresistible. Such situations occur on a large scale when a people's sense of its own solidarity, thwarted or dammed up by historical vicissitudes and thus supercharged with emotion, breaks violently through the resistances to its expression. The mass social pressures thus generated are peculiarly domineering and oppressive with regard to non-conformities. There are then neither effective legal restraints upon them nor overt counter pressures which are found in more complicated situations. The Nazi outburst offers the most striking illustration of this type of pressure, although it is a distinctive feature of all "fascist" movements.

The term pressure group has recently come into use to signify any aggregate, organized or unorganized, which applies pressure tactics. This usage is serviceable if at the same time a distinction is drawn between an interest group and a pressure group. Even if it were true that all interest groups seek in some way or at some time to exercise social pressures, the distinction would be relevant. For the exercise of social pressure is not inherent in the concept of an interest group, say of a musical organization or a philatelic society, whereas it is the defining function of a pressure group. Social pressures, in a word, constitute a particular method of achieving results—one of the many methods which interest groups may adopt.

The tactics which are the essence of social pressures are intended not directly to change attitudes but to control the behavior of recalcitrant or non-conforming individuals. Thus, although propagandism may involve an element of social pressure, it is not necessarily a form of it. The attempt to convert another to one's faith by expounding its values may come within the order of propaganda but not of social pressure. Pressure involves more than persuasion: it implies some kind of external inducement to change or limit the activity of others, ranging from direct or indirect economic inducement to ostracism, intimidation and violence. In other words, it always acts by creating some tension in the individuals to whom it is addressed. If, as is frequently the case, it makes use of the symbols—the flag or the hearth or even the cross—dear to those whom it assaults, it does so in order to constrain or divert their actions, not to liberate them. It promises or threatens with a view to making others conform. This is true whatever the scale of the pressure, which may be as localized as the refusal of villagers to buy from a heterodox storekeeper or as far reaching as the march of the bonus army on Washington, of the unemployed on London or of the Fascists on Rome.

A pressure group is defined by its techniques, an interest group by its objectives. A pressure group as such has no internal function but is directed outward, to the overcoming of resistances. The concept of pressures is therefore of more limited significance for the interpretation of social systems than for that of interests. Interests may be opposed, but the relation of conflict is only one of the manifold relations they exhibit. Broader uniting interests may underlie narrower dividing ones. The theory of interests

can therefore be applied to explain alike the solidarity and the equilibrium of a social system as well as the conflicts that exist within it; whereas the theory of pressures can be made an explanation only of the divisions, the dominances and the resistances within a society.

The limitations of the pressure theory are manifest in the work which more than any other attempts to interpret social arrangements as merely the adjustment of unstable pressures: Bentley's *Process of Government*. It is true that this study is ostensibly confined to the field of politics, which might seem specially favorable for the exposition of pressure operations, but the result is nevertheless unconvincing. In the first place, Bentley does not effectively distinguish pressures from interests, although he denies implicitly the operation of a general interest which modifies and limits the techniques of pressure. Consequently, in the second place, he assumes too readily that the agreements arrived at in the political arena represent the sheer diagonal of particularistic opposing pressures, a view which seems hardly compatible with the relative stability of the political system and the orderly development which it exhibits over long periods. The manner in which cooperative factors are linked with competitive and conflicting ones is lost sight of, so that pressure processes are assigned a larger and more constructive role than they can maintain.

In general the theory of the function of pressures in society still awaits development. The number of descriptive studies of particular types of pressure has increased in recent years. In the political field there are various works on lobbies and blocs; in other works the intensive employment of social pressures in times of war is documented; in the economic field studies have been made of the pressure tactics of public utility and other corporations, including the investigations by the Federal Trade Commission; much of the literature on strikes, lockouts and boycotts likewise illustrates the phenomena of economic pressures. Particular pressure groups in other fields, for example, the Ku Klux Klan, have also been described in some detail. It is incidentally significant that while American writers have notoriously neglected the study of social classes, they have added considerably to the specific literature of social pressures. But there is lacking on the whole any effective analysis of the relation of social pressures to social conflicts; of their role in the building up and breaking down of social structures; of the

conditions under which they are most effective and of the various types of pressure which develop in different cultural situations; of their manipulation of the symbols and their attachment to the thought forms in or through which the mores of the various groups find expression.

The fact that the literature of social pressures is at once so descriptive and so recent is noteworthy, as is the fact that so large a portion of it is American. Pressure groups, as distinct from class groups, are characteristic of a heterogeneous and changeful society, offering special opportunities for the economic exploitation of new conditions and for the formation of unstable expansive groups not integrally related to the established order. Pressure techniques are facilitated also by the elaborate interdependence of a highly industrialized society and by the new means of communication and contact which modern invention has devised. When such conditions develop rapidly, foci of economic power emerge without preestablished status and outside of the authoritarian controls. Therefore, once the fact of their power comes to be realized and resisted, they inevitably resort to pressure tactics. The unorganized juxtaposition of diverse racial and national groups struggling for position and prestige dependent largely on their different facilities for the acquisition of wealth has been an additional factor. The extreme case of the dissociation of power from status is to be found in the organized "rackets" also characteristic of such a society, which are able to maintain themselves by pressures acting not merely on the groups they exploit but even, directly or indirectly, on the authorities whose duty it is to suppress their criminal activities.

The earlier, mostly European, writers on class conflict and the other more ancient forms of social struggle, such as those of racial or religious groups, did not envisage a situation of this kind. Hence the literature of social conflict throws little light on the actual operation of social pressures. It deals rather with the nature and development of opposing interests, the necessity and rationale of social struggle and the functions and results of conflict in general. It considers social conflict as analogous to military conflict, particularly as the broad clash of great organized collectivities on an economic or racial front. It treats rather sparingly the tactics of these struggles, much more their general strategy. But social pressures are concerned mainly with tactics. The pluralist as distinct

from the Marxist point of view conceives of society as diversified into manifold and relatively autonomous organized groups. It offers therefore a more likely approach to the study of social pressures. But most of the writers of this school have so far been more interested in the larger questions of the trend toward a pluralistic social structure, of the relation of voluntary associations to the state and of the reconstruction of society based on the explicit recognition of group autonomies.

R. M. MACIVER

See: INTERESTS; GROUP; CLASS; PLURALISM; CLASS STRUGGLE; CONFLICT, SOCIAL; CONTROL, SOCIAL; SANCTION; COERCION; CONFORMITY; PUBLIC OPINION; PROPAGANDA; LOBBY; MACHINE, POLITICAL; BOYCOTT; PASSIVE RESISTANCE AND NON-COOPERATION; LAWLESSNESS; LAW ENFORCEMENT; OSTRACISM.

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PRICES

THEORY

Price.....See VALUE AND PRICE

The Price System.....MYRON W. WATKINS

PRICE HISTORY.....WILLARD L. THORP
and GEORGE R. TAYLOR

PRICE STATISTICS.....FREDERICK C. MILLS

THEORY. *Price*. See VALUE AND PRICE.

The Price System. The price system may be conceived as a device for limiting the use of resources and the consumption of goods, which have alternative applications, to those particular applications which are deemed to deserve precedence, and to the extent required by their inadequacy to fill completely the selected applications. In other words, prices are a means of directing and checking both production and consumption. In themselves these prices are simply the monetary values of goods and services. They may be determined by custom, by an arbitrary authority enjoying some broad social sanction, by higgling in each separate transaction, by a privileged monopolist either buyer or seller, or in an open market with free bargaining in full competition on both sides. But by whatever method prices may be fixed, their ultimate *raison d'être* is to be found in the advantages afforded by the division of labor which they presuppose and the progressive development of which is predicated upon means for facilitating and expediting exchanges. Whenever, whenever and to the extent that productive functions are specialized, productive processes are lengthened and consumption is rationalized, there inevitably emerge differences, incompatibilities and conflicts among individual aims and choices which impose the necessity for the institution of some recognized method of articulation. In a pecuniary society, where goods are

produced at a monetary cost for sale in markets upon monetary terms to consumers who purchase with monetary means derived from the monetary rewards of productive activity, this coordinative function is served by the system of interrelated prices.

The regulative efficacy of prices in assigning specialized functions, distributing productive resources, providing for future requirements and diversifying consumptive activities is no doubt conditioned by the mode of price determination. What has to be accomplished is the enforcement of the negative checks upon and positive directions to productive and consumptive activities in such a manner as, at the minimum, to make the system of control tolerable and, at the optimum, to realize the prevalent disposition of the community. In certain circumstances a large measure of authority in price fixation, with enforced adherence to arbitrary and more or less inflexible price relationships, may alone suffice to insure a workable fit between productive inclinations and productive opportunities, between productive output and consumptive intake or between consumptive dispositions and consumptive opportunities. In other circumstances a large measure of freedom in the price adjustment process in the market, affording wide scope for the spontaneous expression of individual choices, may be quite compatible with, indeed better calculated to procure, an effective performance of this fitting function.

The price mechanism, it is clear, does not indefeasibly require autonomy. Indeed it has never enjoyed complete autonomy. For many ages price setting by sellers was not a discretionary act, was non-competitive; and so far as there was any volitional element in the process it came chiefly from the buyers' quite limited range of choice. The gradual evolution of legal forms and institutional patterns sanctioning a wide range of individual rights and a relatively free play for private interests may perhaps suggest that these were appropriate to the full development of a pecuniary economy. It is not difficult indeed to conceive this evolution as a function of the realization of the potential advantages from the spontaneous integration of specialized functions through an autonomous price system. But the assertion that freedom of contract and liberty of trade are essential concomitants of any price system is refuted alike by experience and by logic.

Moreover it is not inconceivable that the transformation of the economic organization of society from undifferentiated primitivism to specialized and integrated modernism might have been achieved by other methods altogether. For example, an economic autocracy might have accomplished a similar transformation by direct mandates in execution of a deliberately conceived policy. That historically it was rather the price mechanism in one form or another which provided the indispensable coordinating agency in this development must be accounted for primarily in terms of its superiority under the given evolutionary conditions. This superiority appears to have rested upon two distinct considerations. First, the employment of money as a conventional unit of reckoning values facilitated comparison and presumably therefore made choice more informed and accurate. The use of prices, or money values, as guides to the selection of occupations, the purchase of goods and generally in the organization of productive and consumptive activities has tended accordingly to sharpen economic judgment and to make choice more fruitful. Secondly, the market price system afforded a convenient means of enforcing those checks upon the use of resources which in any case are inescapable, but the incidence of which may be borne with greater equanimity in so far as it appears to be the handiwork of fate. The application of scarce means to specific ends unavoidably excludes to that extent their application to other ends. Frustration and denial are thus in-

exorable features of the economic process. But these deprivations seem to be less onerous when they are not enforced by the arbitrary will of some human authority. It is not to be inferred either that market prices are the automatic, spontaneous, utterly objective phenomena which they have occasionally been represented to be or that they are always humbly accepted as such. It is merely that in the course of a long history they appear to have generally functioned as a screen, tending, if not to hide from common men the harsh conditions of the economic struggle, at least to obscure their proximate cause in human decisions. Thus the market price system, which, with varying circumscription from time to time and from class to class, does leave some area of individual choice and some share of individual responsibility for the actual limitations upon the individual and group use of economic resources, came to establish its superiority over alternative devices for checking and reconciling conflicting human wants and ambitions, which might have been and indeed were tried.

The function of the price system was much less clearly defined and its effectiveness much more dubious in the early stages of the development of the market. It is not necessary to trace in detail the origins of price in primitive trade in order to observe that both in intertribal and in intratribal exchange the quid pro quo very commonly became conventional. Indeed so long as trade remained, as it did for many ages, embedded in a mass of ceremonial observances supercharged with magical significance, there was little room for bargaining. Moreover the extremely restricted variety of articles that figured in this formal gift giving lent itself to the establishment of fixed ratios of exchange. And the fact that a not inconsiderable part of the trade was in the nature of forced exchange contributed to the standardization of its terms after the manner of land rents, priestly fees and other forms of tribute. Under these circumstances the "price system" did not operate primarily to foster a flexible responsiveness between supply and demand. Rather it was a phase of an elaborate and complex system of social organization designed to preserve tradition and discourage experiment under conditions in which the margin of economic surplus was so narrow that group survival depended upon the rigorous repression of risk taking. Nevertheless, customary prices did serve, if somewhat awkwardly and sluggishly, the essential price function of limiting the use of resources to the more im-

portant of their manifold potential applications.

Out of this age long development of trading practises and custom fixed prices there gradually emerged, in classical antiquity and again toward the close of the Middle Ages, markets more secular, more diversified and more extensive in scope. Inevitably there appeared from time to time transactions in new types of goods and in goods from new sources, odd transactions in familiar goods and similar exigencies not contemplated by the customary price structure. And the concept of just price developed partly in response to the need for some extracommercial, non-occasional standard, an absolute formula for guidance in these situations. The ultimate components of a just price were the costs of maintenance of the requisite labor, then the chief factor in production, according to standards of living prescriptively determined for each productive class. So long as most goods were the direct products of a single class of artisans or at most of two or three crafts working in a settled sequence, it was not difficult to give the principle fairly effective application. But with the continued subdivision of industrial processes, the growing diversification of products and the steady expansion of markets the rule of customary prices supplemented by the nebulous principle of just price became less and less adequate.

Still there was no suggestion of relying upon an open market and free competition to fix prices; production and exchange were rigidly restricted by the conservative collective sense of communities still lacking a substantial surplus above the necessary means of subsistence. Rather, in response to the increasingly obvious deficiencies of the traditional price structure and of the mechanism of just price determination there developed piecemeal a system of regulated prices. The beginnings of this system are indistinct and came at different periods in different regions; nor was its course of development everywhere uniform. But in general the era of regulated prices may be stated to have begun with the establishment of the guilds and to have persisted, even if in a moribund condition, into the seventeenth and eighteenth centuries. The responsibility of regulation passed successively from merchant guilds to craft guilds, thence to local authorities and eventually to national governments, although the lines of demarcation are not altogether clear. The regulatory jurisdiction embraced chiefly manufacturing processes and included, in addition to the other

elements, the prices of raw materials, labor and finished products.

The increasing rate of change in the scope and direction of trade relationships, in the technique of manufacture and in the diversification of merchandise following the era of exploration and discovery eventually made this system of regulated prices obsolete. It was a system designed for and peculiarly adapted to the requirements of a static society. A society founded upon status could not long resist the disturbing tendencies set in motion by the opening up of unbounded opportunities for enterprise. Moreover the acquisition of fabulous treasure from piracy and the despoliation of backward peoples overseas, added to the mounting product of the more prosaic but ultimately more significant cumulative advances in industrial efficiency, provided a hitherto unparalleled disposable surplus, which was the *sine qua non* for a social sanction of genuine private adventure in trade and industry. Finally the enormous additions to the European stock of precious metals from across the Atlantic so upset the long prevailing proportion between specie and exchangeable wealth that the maintenance of the traditional price structure became an insuperable task. The regulatory machinery was simply incapable of coping with these powerful forces making for price movements of unprecedented magnitude, frequency and variety. The downfall of the regulated price system marked the dissolution not simply of a moribund price mechanism but of an outgrown social and industrial order.

The circumstances of its lapsing indicated the nature of the price system which was destined to supersede it. As it had fallen into desuetude by virtue of its inflexibility, the succeeding price system was bound, above everything else, to provide for the maximum of flexibility. This it did by securing to everyone the utmost freedom to buy and sell. Such was the meaning of *laissez faire*. Of course this liberty of trade was not introduced suddenly everywhere; nor was it ever realized completely anywhere. By the end of the nineteenth century, however, it represented the dominant ideal of economic policy and the accredited aim of economic statesmanship virtually throughout Christendom. The "goods, wares and merchandise" of commerce were subject in their ebb and flow solely to the dictates of market price. Productive labor was set at one task and deprived of another by the imperious commands of market price; neither artists nor scientists escaped this encompassing

suzerainty. Consumers were offered this and denied that in accordance with the impersonal will of the market as expressed in prices. Investors no longer built mills and factories; they were permitted instead to contribute money funds in exchange for capital shares at a market price which responded to the realized and prospective margin between the market prices of costs and the market prices of products. In a word, everything had its price and the price was the criterion of its economic significance.

The theory which supported this prodigious spread of the price mechanism and the price mentality took for granted a passive or neutral role for money in the composition of the price structure. The exchange interrelationships of goods as expressed in prices were conceived to be basically the product of the interaction of real costs and real utility. While it was recognized that these primary forces were always mediated by individual judgments, the prevalent conception of the rationalistic, utilitarian nature of man justified the assumption that these individual judgments were simply the channels through which the ultimate real forces brought pressure to bear upon prices in the market. The processes of valuation thus abstracted and impersonalized provided an automatic adjustment, as nicely worked out by the marginal analysis, whereby the maximum product was realized at a minimum cost. The pervasive tendency toward equilibrium which issued from this automatic adjustment was admitted to be subject to friction and temporary disturbing influences, but these were readily traceable to perverse twists and anomalous obstructions in the channels of individual judgment or to fortuitous deviations in the course of nature. The theory exempted the price system itself from any share in the responsibility for the failure of a free market economy to realize at all times the maximum satisfaction of human wants. If in practise recurrent dislocations and occasional distress persisted, this was in spite of, not because of, the subservience of productive and consumptive activities to the regimen of prices.

As usual the first breaches in the massive authority of this autonomous price system came from the pressure of practical disillusionment rather than from the thrusts of theoretical inquiry. It was the harsh incidence of an exclusive reliance upon free competition in an open market that led to efforts to amend it and here and there to abandon it. As usual too concern for their interests as producers awakened certain

classes to the shortcomings of the price system appreciably before a concern for their interests as consumers prompted other groups to challenge from a different angle this same economic orthodoxy. In neither case of course was the whole system of price making attacked. Men do not relinquish their faith in a fetish simply because it fails them in some specific quarter. So when working men found that reliance upon the prices set for their labor in an open competitive market was prejudicial to their advancement, they determined to bargain collectively and to sell their labor, not at market prices as mere commodities supposedly were sold, but at "fair" prices; that is, for as much as might be obtainable. Likewise when business men, who by and large had gained most from laissez faire, perceived that market prices for their products were not invariably profitable, they looked for a substitute in fair prices as determined by the sellers; elsewhere, e.g. in the employment of labor, they were quite content that market prices should rule. But collusive agreements did not provide the sole avenue of escape from the verdict of the market. For those who were fortunately situated in the newer industries the patent laws provided a convenient and effective means of blocking out competition, enabling fair prices to be set without fear of contest. A much larger number whose products were quite ordinary articles of commerce found it possible to identify their wares by trademarks or brands and by advertising to create for them a certain distinction, often specious; thereby prices might be set taking full account of the buyers' "education" in the peculiar merits of the advertiser's particular brand.

Finally consumers also became aware that prices were no longer the objective outcome of a multitude of spontaneous forces represented by the independent bids and offers of innumerable individuals operating in pursuit of competitive private interests. The situation did not at first present itself as a chronic disease of the market price system; it appeared rather as a malady peculiar to certain industries. Upon this diagnosis the remedy plainly called for was a specific to be administered ad hoc to each of the ailing as occasion required. Hence isolated treatment was provided for railroads, gas works, electrical plants, telephone systems and numerous lesser public utilities. The rest of the business community was warned to keep away from the afflicted. If other industries not subject to monopoly quarantine showed symptoms of the

same disease, they were placed upon the operating table to be dismembered.

Thus in various directions practical exigencies brought about a considerable departure from the rules of economic conduct prescribed by the market price regime. Resources were not allowed to flow without help or hindrance where prices dictated (trusts, public utility franchises, subsidies, tariffs); methods of production were not permitted to be chosen upon a basis solely of cost price considerations (factory legislation, pure food and drugs laws, health regulation); the distribution of income by the automatic processes of the market was interfered with (collective bargaining, corporate accounts manipulation, rate regulation, activities of trade associations and cartels). In these and other ways the price system was being amended, restricted and annulled in practise some time before its sanctions were questioned in theory.

When eventually theory did undertake to analyze the significance of these developments, the explanation most generally accepted ran in terms of monopolistic tendencies. Certain conditions of modern industrialism were believed to foster monopoly. The most important of these was the diminishing cost tendency in production, which in turn was conceived to spring from the growing importance of fixed costs and of joint costs in productive processes dominated by the machine technique. Some students found a large measure of responsibility also in the conjunction with such technical factors of the legal privileges associated with the pervasive reorganization of business in the corporate form. These accounted for no inconsiderable part of the advantages (diminishing cost) of increasing size and hence for the trend toward monopoly. In the light of these theories the tendency toward monopoly appeared to be inherent in the existing economic order; and since monopoly prices were regarded as arbitrary and the prices set by administrative agencies instituted for their regulation were no less arbitrary and even more inflexible, there was no escape from economic arteriosclerosis. There could be no doubt of the gravity of the consequences; for arbitrary and stereotyped prices have no place in an economic system of which change is the most essential characteristic and which depends for survival upon its capacity to insure constant adaptation to new conditions.

Later studies of monopoly price converged upon the conclusion that if it was not as arbitrary as had been at first supposed it was even more

inflexible. In particular the analysis of actual price movements under monopoly, duopoly and monopolistic competition revealed an extraordinary resistance to price changes. Under the circumstances attention was hopefully directed to the gradual spread of monopoly throughout industry, which, it was expected, would solve the ever more vexatious problem of instability. It was suggested that if monopolistic producers in a nominally competitive era had achieved such power to fix prices and to control markets that they could practically ignore general business disturbances, the extension of the monopolistic tendency might furnish a key to the solution of the business cycle riddle. It was argued further that monopolists, even granting their exactions, were in a better position than a group of independent competitors making estimates at random to adjust productive capacity to potential sales volume at cost indemnifying prices and to provide against untoward changes in demand.

The march of events, however, unremittingly aggravated the burden of losses from wide sweeping price fluctuations, thus confounding not alone the theorists who placed the responsibility on the introduction of change resisting elements in the price structure but also those who sought to explain these evils as the consequence of the tardy or arrested development of centralized planning and control within each industry. For experience ever more plainly indicated that the evils of periodic price recession and trade depression were alike too great to be stemmed by arbitrary measures designed to stabilize particular industries or to fix specific prices, and too insidious to be assessed solely or even primarily to the comparatively sporadic and collateral transformations in the structure of competitive industry represented by the cartel and trust movements, public utility development, trade union organization and the like.

In the search for the disrupting force which was making the economical administration of industry under the price system increasingly difficult attention turned therefore to the one element common to all prices, the monetary factor. It had long been recognized and was generally accepted, after Hume at least, that the volume of money in circulation had a direct relation to the level of prices; yet the effort to trace any precise quantitative relationship between the two awaited not only an urgent practical motivation but also more adequate statistical records and a suitable statistical technique. Toward the close of the nineteenth

century the gradual development of all of these prerequisites combined to make feasible the formulation of a definite theory of the relationship between money and prices.

The exponents of the quantity theory professed to find a direct causal sequence between changes in the amount of the circulating medium and changes in the general level of prices. As every specific price is simply an expression of the terms upon which a certain amount of goods or services are exchanged against money or a money equivalent, it was reasoned that the price level in any period must be expressible as an average compounded of the total amount of means of payment used in the settlement of transactions during that period divided by the total volume of goods and services sold. It was further claimed that the division of an index of the average volume of cash and credit means of payment in circulation, multiplied by their velocity or turnover in a given period, by the index of the total volume of trade in that period gave a quotient representing the average change in the general price level relative to the base period. If this quotient corresponded to the actual change in a representative list of prices as measured directly by index numbers based upon market data, the computation was supposed to verify the quantity theory of money. This statistical "proof" is so self-evident that it proves nothing, nor does it clarify the origin or nature of the forces which cause the change.

Exponents of the quantity theory, however, supported their general contention also by propounding reasons independent of the alleged proof. The argument was that the total volume of trade, although it may respond within narrow limits to changes in the general level of prices, does not initiate such changes, but tends rather to arrest them by parallel movements. The average velocity of circulation of the available means of payment, being determined by habit, was regarded as a relatively constant factor. The ratio of credit money to cash money, the technical efficiency of banking remaining unchanged, was declared to be subject to variation only within comparatively narrow limits. Finally, it was contended with special emphasis that the price level itself was a passive factor, being simply a reflection of market conditions, i.e. of the ratio of the supply of goods and services to the supply of money instruments. Thus by a process of elimination the exponents of the quantity theory reached the conclusion that the general level of prices is determined by the

quantity of commodity money in circulation. Fluctuations in this item were believed to be spontaneous and self-generating (gold discoveries, technical progress in ore concentration and the like), making it the independent variable solely responsible for general price movements. Whether valid or not in reference to long time changes in the level of prices, the theory offers no satisfactory explanation of the cyclical downward and upward swings of prices, since there is certainly no corresponding fluctuation in the supply of commodity money. Even if, in accordance with Kondratiev's thesis, it is granted that technological progress in goods production tending to reduce prices sets in motion exploration and research in gold production tending eventually to counteract this price depressing influence and vice versa, the oscillations in prices so induced could work out only over several decades, as Kondratiev himself admits.

Determined as they are to trace cyclical price instability to monetary factors, the quantity theorists commonly fall back upon the conceded variability of the ratio of cash money to credit money or, more specifically, of the ratio of bank reserves to bank deposits. They maintain that prosperity breeds an optimism which is reflected in easy credit, and that in any case a substantial surplus of loanable funds will have tended to accumulate in a preceding period of price recessions. For a time the absorption of this credit in expanding production may readily be effected without disturbing the price level, the volume of trade expanding *pari passu* with the volume of deposit currency. Eventually, however, it is argued, the increasing supply of credit outruns the capacity of the industrial machine to increase its output—since the elasticity of credit under modern banking methods surpasses by far the elasticity of production—whereupon the excess credit finds an outlet in speculation and advancing prices. This process continues until the overextension of the deposit reserve ratio approaches the preestablished legal limits or the limit of safety according to banking tradition. Thereupon credit tightens, goods are dumped on the market, prices decline, collateral is impaired, loans are still further curtailed, and the same sequence of events is repeated until both credit and prices decline to an irreducible minimum. In this way the responsibility for the cyclical fluctuations of trade has been traced to cyclical fluctuations of prices, and the responsibility for these to the peculiar conditions shaping the credit policies of the banks.

The difficulty with this theory is that it involves an oversight of the distinction between production and trade. American writers especially, influenced no doubt by Irving Fisher's formulation of the equation of exchange, have been prone to neglect the confusion of a quantity element and a rate element in the ambiguous factor "volume of trade." If T be taken as a symbol for transactions rather than for trade, which it really must be if a single symbol is to represent the amount of work to be done by money, there is no apparent reason why the shifting of the direction of credit extensions from productive uses to speculative uses should affect the price level. Whether a borrower uses credit to forward the production and distribution of goods or in speculation, simply causing a given quantity of goods to turn over more times than it otherwise would, can make no conceivable difference from the standpoint of the preservation of a balance in the equation of exchange. The volume of trade in a given period may be increased just as well by passing the same quantity of goods through more hands as by passing more goods through the same hands; so long as the transactions that have to be settled increase *pari passu* with the means of settling transactions, no disturbance can result in the general average of prices. It remains to be shown therefore how increased speculation could cause an inflation of prices.

It is sometimes asserted, however, that the speculative use of credit results in accelerating its velocity of circulation; that, as compared with credit used to finance the time consuming operations of actual production and distribution, bank deposit currency employed in purely speculative purchases and sales circulates much more rapidly. Little is known as yet about the actual or comparative velocities of money and credit in the hands of various classes in the community, but even if this contention were valid it would scarcely yield a plausible explanation of cyclical change in the price level. For this amendment to the quantity theory, no less than its original variant, neglects the rate element in the volume of trade. Until some reason has been suggested for supposing that when bank deposit or other currency turns over more times in a given period it does not cause goods turnover to increase correspondingly, it is difficult to see why speculative credit is peculiarly efficacious in bringing about price changes. Some writers have gone even further, contending that a change in the velocity of circulation of means of

payment must produce an equal and simultaneous change in the rate of turnover of goods.

In response to this theory there has developed a school which shifts the onus for short run variability from the quantity to the rate element. The velocity theorists, as this group may be called, hold that the cyclical changes in the velocity of circulation of money are not matched by corresponding changes in the rate of turnover of goods and hence cause price fluctuations. Various reasons are assigned for this divergence in the two rate factors. Thus the "parcels theory," commanding perhaps the largest number of adherents, maintains that during prosperity, with a tendency toward more and more diminutive scales of purchase and sale and proportionately greater frequency of transactions, the efficiency of a given volume of means of payment is increased, without there being necessarily any increase in either the volume or the rate of turnover of goods. Although the parcels theory may not be susceptible to logical attack, its practical validity rests upon the assumption that increasing prosperity involves an increasing *morcellement* of transactions. It is difficult to see concretely what is meant by parceling unless it is simply another term for the familiar trade phrase "hand to mouth buying." And if this be true, the theory makes no appreciable contribution to the explanation of cyclical price fluctuations, for common experience indicates that hand to mouth buying becomes less prevalent as prosperity grows and speculation becomes bolder.

Another form of the velocity theory, recently propounded, would account for an alleged growing discrepancy between the velocity of circulation of money and the rate of turnover of goods during the period of prosperity by an assumed increasing prevalence at such times of the transfer of goods without any corresponding transfer of money, either cash or credit. It sees in the increasing proportion of book and instalment debts to total trade as prosperity waxes an accumulation of "unfilled orders" for the "money trade," as it were. It is conceded that the transaction of trade upon mercantile and retail credit could lead to no disturbance in the equation of exchange affecting prices, if the amount of "money work" carried over into a given period by virtue of deferred settlement of transactions consummated in the preceding period were exactly counterbalanced by the amount of delayed money work carried over into the succeeding period. But the contention

precisely that this cancellation does not occur as prosperity advances, by reason of the increasing ease with which goods may be obtained upon a simple promise of deferred payment. There is thus built up a backlog of work for money to do, which cannot indefinitely be held in abeyance pending the time when money may be idle. Eventually those who buy on credit accumulate so large a volume of debts that some among them can no longer continue to maintain the demand by further purchases upon this basis; and others still less prudent find that deferred payments promised for a definite date cannot be met out of current income. They are constrained then by anxious creditors to shift their demand from goods to money. At first there may be some effort to get money exactly as they have been getting goods—upon simple promises to repay in the future, by substituting bank credits for book credits. But eventually the debtors are forced to convert goods or services back into money; this tends to increase the value of money and to diminish the value of commodities, thus accounting for the transition from prosperity to depression. While this book credit theory does not lack logic or plausibility, it can scarcely account for the full amplitude of the periodic price swings, particularly in view of the extent to which in recent times immediate settlement by cash or bank credit instruments has made headway in both wholesale and retail trade relative to charges upon open book account. And if the spread of instalment sales since the World War appears to be a tendency working in the opposite direction, it should not be overlooked that a large part of them is financed ultimately by bank credit. Precisely what share of responsibility for giving impulsion to cyclical movements is to be assessed against book and instalment credit it is impossible to ascertain, since sufficiently comprehensive statistical data are lacking.

The foregoing theories of general price instability trace price level changes in the last resort to the peculiarities of operation of an autonomous money and credit mechanism and neglect changes in trade relationships, in the supply and demand for various goods and services. It should be obvious, however, that, since any ratio may be disturbed by a change in either of its two terms, price, which is a ratio of the number of money units to the number of units of a particular good, may be altered just as effectively by a change in its goods term (denominator) as by a change in its money term

(numerator); by inference the same holds true of a price level, which is simply an average of the specific price ratios in all exchanges of goods or services against money in a given period. There would seem to be no inherent reason therefore why only the money term of this ratio should be referred to for causes of changes in the price level. Moreover while the money term is subject only to quantitative variation, the change in the term representing goods may be either quantitative or qualitative. Certainly the forces affecting the readiness to purchase (bids) and the readiness to sell (offers) would be altered with a change in the quality of goods traded; and experience indicates that these qualitative changes in the goods and services sold are neither few nor insignificant. The same circumstance affects the price level ratio. The readiness of buyers to part with the available means of payment is conditioned no less by the qualitative aspect of the total offerings for sale than by their volume. Here, however, the interrelationships of the various kinds of goods and services offered for sale become the major consideration. In other words, the quality of the total productive output of industry is primarily a function of the right proportions of the different varieties of products offered for sale. If, to take a very simple example, the quantity of hose offered for sale is wholly out of line with the number of pairs of shoes put on the market, the output of industry is to that extent unbalanced and the price level, not simply the price of hose or shoes, will be affected accordingly. For as the supply of each commodity constitutes ultimately a part of the demand for all other commodities, an impairment of the purchasing power of the suppliers of a commodity through forces affecting its price adversely cannot fail to react unfavorably upon the demand for and upon the price of other products. It is this ultimate and infeasible interdependence of all the price items making up the price structure which the mechanistic, quantitative theories of price movement are prone to overlook.

The important problem therefore is to determine the right proportions of the different varieties of products making up the total volume of offerings for sale, the standard whereby the various flows of supply may be held to be out of line. This is simply and solely the income distributing disposition of the community. In a free exchange society there can be no appeal from the complexion of demand—perhaps irrational, certainly never predictable—as it appears

in the market; it constitutes what might be termed, to adapt Hayek's phrase, the structure of consumption and saving. It is the capacity of entrepreneurs (or, in any alternative form of society, the directors of production) to match this distribution of demand in the structure of production which measures the "quality" of the aggregate industrial and commercial activities. In other words, the promptness and facility with which goods are exchanged against money and this money is again exchanged against goods, and thereby the price terms upon which these exchanges take place, are a function of the degree of correspondence between the composition of the total supply (volume of production) and the complexion of the aggregate demand.

In the essentials of this thesis there is nothing new. Numerous students have traced the periodic breakdown of prosperity and disorganization of markets to what amounts to misdirected production. Thus A. Spiethoff finds the underlying difficulty in the differential rate of gestation of instrumental goods and of direct consumption goods; Werner Sombart in the differential rhythm of organic and of inorganic processes of production; W. Stanley Jevons and H. L. Moore in meteorological periodicity, which affects agricultural production; Joseph Schumpeter in a lag in invention and discovery, whereby new products are in periodic deficiency. In these as in other explanations which might be cited the root of the evil is found in the development of "bad" relationships among different types of goods from which proceed price disturbances. Theories of this type stand diametrically opposed therefore to all varieties of the quantity theory, which, in whatever other respects they may differ, agree in considering price changes the cause and trade dislocations the effect.

Recently there have been distinct advances toward integrating these contrasting types of price theory. Starting from Knut Wicksell's distinction between the real rate of interest (which balances the demand for investment funds and the supply of savings) and its market rate, a distinction which in slightly varying forms has been emphasized also by Thorstein Veblen, Jean Lescure and Irving Fisher, economists have sought to establish a connection between the credit expansion characteristic of easy money periods and the direction given to production, which would furnish a logical explanation of the movement of prices. Particularly J. M. Keynes in England, Alvin Hansen in the United States

and L. Mises and F. A. Hayek in Austria have been working upon this problem with significant results. Keynes, however, still under the spell of quantitative notions, tends to regard the spread between the rate of investment and the rate of saving as primarily a factor retarding or accelerating the outflow of bank credit and hence affecting the volume of purchasing power and the general level of prices. Hansen, on the other hand, while conceding that the emergence of a discrepancy between these rates is significant in stimulating or curtailing operations in capital goods industries and thus makes them especially susceptible to misdirection, circumspectly treats their resultant price variability as only one of many factors upsetting business calculations and producing an asymmetrical development of the industrial structure.

To the Austrians the fluctuations in the general average of prices arising from a change in the volume of bank credit are less significant than the disturbance in price relationships issuing from the changes in the directions in which bank credit flows. Thus when the rate of interest in the money market is held below the real, or equilibrium, rate, the increase in the proportion of total purchasing power assigned to producers' goods markets and the consequent tendency to make production more roundabout, not only extensively (by the addition of new stages to the productive process) but intensively at every stage, produce changes in the relative prices of various kinds of products and in the relative prices of the same product at different stages of production. It is these changes in relative prices and the misdirected efforts made to frustrate them or to facilitate and take advantage of them which cause stresses and strains in the industrial structure and lead to its recurrent collapse. If the supposed enhancement of the proportion of total purchasing power directed toward producers' goods were the result of increased savings and a decline in the real rate of interest, the borrowers might achieve a readjustment of the relative productive capacities and relative supplies of products in different lines which would approach a new equilibrium representing an approximate adaptation to the changed conditions in the intertemporal distribution of income. But when the enhanced proportion of purchasing power rests upon no more stable a basis than a fictitious redundancy of loanable funds, the chances of a prudent and yet prompt adaptation of the structure of production to the altered price relationships are remote. This is

more and more the case as the increasing command of the mechanical technique tends steadily to enlarge the relative importance of fixed or specific producers' goods to the more fluid forms of instrumental capital.

It may be conceded that the shifts in relative prices are of supreme importance, since they determine directly entrepreneurial decisions in regard to when, how and of what production shall be undertaken. It may be granted also that the significance of these shifts has been neglected by students seeking to formulate a dynamic theory of prices upon a mechanistic model by the use of quantitative methods ill adapted to the discriminative treatment of the multifarious factors involved in the qualitative complexion of the price structure. But it is far from certain that the shifts in relative prices are invariably initiated by the discrepancy between the real rate of interest and that prevailing in the money market. Thus at the beginning of a recovery there are other costs besides capital costs, e.g. labor costs, which are lower in the market than their equilibrium price, as Mitchell has emphasized. Nor has it been convincingly demonstrated that the price shifts always take the form of a general enhancement of the prices of producers' equipment relative to the prices of finished goods. Experience seems to confirm, as Schumpeter contends, that maladjustment is caused not by overexpansion in the production of producers' goods generally, but rather by the unbridled extension of construction in some one industry or comparatively few industries due to the discovery of some exceptionally advantageous new combination of factors or some new basis of appeal for consumer patronage. Moreover this entire thesis rests upon the insecure foundation of the Böhm-Bawerk theory of interest, which is assumed to determine immediately and unqualifiedly not only the prices of capital goods but also the nature of productive processes.

On the whole may it not fairly be concluded that the increasingly speculative (devoted to future ends) character of the industrial process, the persistently irresponsible management of the community's savings and of industry's working capital in the custodianship of the bankers and the cumulatively dynamic character of industrial technique as well as of consumptive taste combine to foredoom a spontaneously directed economic system, administered by reference to price gauges, to alternate spasms of unreckoning enterprise and stupors of bewilder-

ing disorganization? The modern industrial system might be compared to an orchestra with an ever changing personnel (enterprisers), veterans with familiar instruments continually being displaced by recruit musicians with novel contraptions of their own design, practising for a symphony of which the score is being continually altered as the playing proceeds, under the conductorship of several self-appointed maestri (bankers), each wielding his baton in accordance with his individual reading of the score. Occasionally the tempo is advanced concertedly but never evenly, and pandemonium follows every crescendo. Although the economic orchestra is provided with a score in the price system, its composition cannot be ascribed to infallible genius. Of course if simple melody upon familiar themes would suffice to meet the musical aspirations of the audience and a disciplined drill to satisfy the artistic ambitions of the players, there is no good reason why a single conductor should not be selected who, improvising as he went along, might dispense with a score altogether. But pending the realization of these conditions no promising way has yet been suggested for achieving an unbroken economic symphony out of the creative talents of a host of vain Apollos and defiant Pans, each with a baton in his instrument case.

MYRON W. WATKINS

See: MARKET; MONEY; ORGANIZATION, ECONOMIC; JUST PRICE; PRICE REGULATION; MONOPOLY; COMBINATIONS, INDUSTRIAL; GOVERNMENT REGULATION OF INDUSTRY; PUBLIC UTILITIES; BUSINESS CYCLES; BANKING, COMMERCIAL; MERCANTILE CREDIT; RETAIL CREDIT; INTEREST; SAVINGS; INVESTMENT; INVESTMENT BANKING; PRICE STABILIZATION; STABILIZATION, ECONOMIC; INTERNATIONAL TRADE.

PRICE HISTORY. Not much is known about the history of prices in the ancient world, because of both paucity of data, a difficulty which will never completely be overcome, and lack of trained attention to the subject, an obstacle which is rapidly disappearing.

In early ancient times prices were expressed in terms of weights of the money metals, most frequently copper, lead, gold or silver, and payments were made in rings, bricks or bars of standard weight. Coins first appeared about the seventh century B.C., but prices expressed in ancient coinage terms are difficult to interpret for it is frequently impossible to determine whether coins circulated at their bullion value (or bullion value plus cost of coinage) or at their face value.

former type will probably increase considerably as a consequence of mass unemployment, which makes for shorter hours of work and for the resettlement of the land. Significant in this connection are the proposals in the United States to establish small factories in connection with the government's first attempts to resettle subsistence farming colonies under the provisions of the public works administration act of 1933. Nor should it be forgotten that the urban concentration of modern industrial life seems to be changing rapidly in the direction of a break up of overgrown centers and their replacement by a rural and semirural organization of settlements and workshops. The English garden city movement was only a dim and indirect forecast of this tendency. The same aim has been expressed and put into practice by certain American entrepreneurs, notably Henry Ford and Jackson Johnson of the International Shoe Company. The recent expansion and cheapening of facilities for the transportation of men, materials and power will probably promote the growth or at least retard the decay of rural industries, as in the case of small sized industries generally.

CARL BRINKMANN

See: RURAL SOCIETY; HANDICRAFT; PUTTING OUT SYSTEM; HOMEWORK, INDUSTRIAL; ARTSEL; PRODUCERS' COOPERATION; LOCATION OF INDUSTRY; PEASANTRY.

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RURAL SOCIETY as compared with urban society is marked by a relative predominance of the agricultural occupations, by the closeness of the people to a natural as contrasted with a human environment, by the smallness of its communal aggregates, by a relatively sparse population, by greater social homogeneity, by less internal differentiation and stratification and by less territorial, occupational and vertical social mobility of the population. The individual in rural society as a rule has fewer contacts with others, he associates with people from a smaller geographic and social area, a greater proportion of his social contacts are face to face and his relationships with any particular individual tend to have a longer duration. The people of rural society live in systems of organization which tend to include a higher proportion of status as contrasted with contract relationships; they are bound to a greater extent by organic ties rather than by the cooperation made necessary by economic division of labor.

Rural society has been variously defined as comprising all persons residing in the open country or all persons connected directly with agricultural occupations or all persons residing in administrative units of less than a given size. In Europe local units having a population of fewer than 2000 persons are defined as rural; the United States census first regarded as rural towns and villages of fewer than 8000, including the open country; later all persons residing in the open country and in communities of fewer than 4000, subsequently of 2500, were classified as rural inhabitants. As a provincial city of 25,000 people, however, may be more akin to rural society than to urban, whereas a smaller aggregate may belong more to the urban world, it is preferable to define rural society typologically rather than statistically.

The distinguishing economic, social and political characteristics of rural society are derived from its relationship to the land, from which most of its inhabitants make their living. The diet and the living conditions of rural areas are closely related to their land products and therefore tend to be regional and to be affected pri-

marily by natural calamities, such as famines. Rural politico-social classes are those related to the control of land as contrasted with the greater orientation of the urban political social system about personal and movable property, material display and human groups. Vertical social mobility in rural society is connected with movements up and down the scale from landlessness to the position of a landlord. A conflict of classes may develop within the society on the basis of landownership: small landowners against large, tenants against landlords, hired laborers against owners of estates. Agrarian radicalism has historically been closely connected with land rights, as illustrated in the history of China and recently in the Mexican peasant movement following 1912, in the revolution in Russia, in the peasant movements in central Europe following the World War and in the farmers' holidays in the United States that resulted from the foreclosures of mortgages after the crisis which began in 1929. The importance of land rights is also shown by the nature of voting in rural societies where legislation is by popular referendum.

Oriental society has been historically more rural than has western society, with the exception of the period following the decline of Roman culture when Islam and China were probably more urban than was western society organized around Constantinople. Rural society declined in relative importance in the Mediterranean region between the time of the conquests of Alexander the Great and the reign of Constantine and also in modern times in Europe and in the United States. This decline has been reflected only numerically, in the proportion of people living under rural conditions, for the greater development of urban society as a rule enabled the rural population to increase and to have higher material standards than during the times in which rural society was relatively more predominant. The lines of distinction between rural and urban society are now less marked in Europe and in the Americas than in the Orient, because of the commercialization of agriculture and the more mobile populations of the former areas; a few kilometers from the oriental centers of urban society, such as Tokyo, Shanghai, Bangkok or Bombay, one still encounters a different world. Variations within rural society depend upon whether the region is a pioneer fringe, a settled community or an immediate urban hinterland. The pioneer fringes which existed in the United States between the sixteenth and nineteenth centuries or in northern

Europe in the Middle Ages varied considerably from the older settled regions or the market gardens, suburban estates and other types of rural society to be found around the large cities. The agricultural possibilities of the soil determine to some extent the character of the rural community. For instance, the rural society on the eastern plains of England has always differed considerably from that in the more hilly sections of Wales. The manorial system of England, as it developed after the invasions of the Romans and the other foreign groups in the Middle Ages, was considerably different from the more self-sufficing tribal and family economy to be found in the western part of the country.

The economic characteristics of a relatively isolated society develop around its regional self-sufficiency. The family tends to manufacture much of its own goods; what it does not make is generally produced by artisans who reside in the villages or in the nearest communities. Industry and agriculture are so little divided that it is extremely difficult to separate the occupations from each other, unless one considers the task alone and not the individuals. Even the local leaders, who carry on the functions of religion, medicine, art and government, participate in one way or another in the direct activities of agriculture. Extremes of conspicuous consumption or of pauperization do not often become as apparent as in urban society. Rural societies that are less isolated from the urban world have economies more closely approximating urban economy. Trading towns and villages which replace temporary and periodic marketing places of the peasants become the centers of rural social life. Banks and money economy increase; prices are quoted in units of currency based upon a standard measure, and credit begins to play a production rather than merely a consumption role. Peasants who formerly borrowed money from relatives largely in their own village borrow for economic purposes from money lenders at high interest rates. During the period of change from the pure rural society to the urbanized rural society much property passes into the hands of non-agriculturists, and the inevitable result is antagonism and conflict between the social classes. This antagonism is enhanced when the money lenders, who come from the urban society, are of a different race, such as in the case of the Sikh money lenders in India and the Chinese or Annamese traders among the peoples of Malay origin. As the society becomes an urbanized rural aggregate

commercial banking appears, and later rural banks tend to be absorbed by urban banks; technological changes influence agriculture and rural society suffers from the economic fluctuations of urban society. In rural regions where agriculture has become essentially capitalistic, as in some parts of the United States and in the plantation areas of the tropics, the class struggle assumes a form comparable to that of industrial societies.

Contact with urban life facilitated by improvement in transportation leads to the use of ready made garments and other urban commodities. Houses are not as frequently built and roofed with native materials as before; instead lumber and other building supplies are purchased from traders. Culture and language symbols become more national and less local; urban fads, fashions and styles permeate the rural society; economic division of labor increases and illiteracy tends to diminish. Educational, hygienic, technical or economic public services improve but rarely come to be as advanced or as numerous in rural societies as they are in corresponding urban societies.

Regional cultures arise out of the local environment, the inventions of the people and the selectivity of traits which rural society secures from the urban. It is difficult to determine how much of a specific rural culture is indigenous to the country and how much of it is selected from past generations of urban influence. Rural art is manifested in domestic articles, in religious images and in festivities such as folk songs, dances and games; in the more purely rural societies each village is often recognized by the type of cloth that is woven there, each region by the type of articles which it wears. In commercialized rural societies, however, these distinctive characteristics disappear as part of the standardization process which results from the general movement of cultural interchange between rural and urban communities. The migration to the cities of the younger generation and of many families has tended to break down the vitality of the social life of the rural communities. The economic crisis beginning in 1929 led to a decided movement, in the United States as in other parts of the world, from the cities back to the country; this return movement has tended further to efface the differences between rural and urban cultures.

The judgment of Siegfried, Demangeon and others that agglomerated village types of rural societies have a different kind of culture from

those with isolated farm homes is doubtful, for there is little difference between the cultures of the isolated families and the village families when both operate under the same conditions. Among the important factors in the increase of the isolated farm homes in western society are the amount of land available and the economic rationalization of agricultural economy. Whatever differences in culture are found may be ascribed to these factors rather than to the location of the home, because grouped villages tend to take on the same cultural changes as do isolated farms when the trend of rural society is toward commercialized culture.

CARLE C. ZIMMERMAN

See: AGRICULTURE; PEASANTRY; VILLAGE COMMUNITY; AGRICULTURAL ECONOMICS; AGRICULTURAL COOPERATION; FARMERS' ORGANIZATIONS; AGRARIAN MOVEMENTS; AGRICULTURAL LABOR; RURAL INDUSTRIES; AGRICULTURAL EDUCATION; AGRICULTURAL FAIRS; EXTENSION WORK, AGRICULTURAL; COUNTRY LIFE MOVEMENT; CHAUTAUQUA; FOLK HIGH SCHOOLS.

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RURAL SOCIOLOGY. *See* RURAL SOCIETY.

RUSH, BENJAMIN (1745-1813), American physician and social reformer. After graduating from the College of New Jersey in 1760 Rush

at Turin, where he was a very successful teacher.

Scialoja's political career began when he became minister of agriculture and commerce during the brief constitutional interval in Naples in 1848. With the reaction he was kept in protective arrest for three years and then sentenced to nine years' imprisonment, but on the intercession of Napoleon III the sentence was commuted in 1852 to perpetual exile. Cavour then gave him a legal post in connection with the government of Piedmont. In his pamphlet *Carrestia e governo* (Turin 1854) he defended Cavour's unpopular policy of free trade in grain as a curb on high prices. His celebrated pamphlet *Note e confronti dei bilanci del Regno di Napoli e degli stati Sardi* (Turin 1857) compared the two governments in various respects, notably in their financial systems, to the complete disadvantage of Naples.

With the liberation and unification of Italy Scialoja assumed a prominent place in public affairs. He was minister of finance for Naples under Garibaldi's dictatorship and again under Victor Emmanuel. He represented Italy in the negotiation of the liberal commercial treaty of 1863 with France. From 1865 to 1867 he was finance minister of Italy. Although he had always condemned paper money, the financial pressure of the war with Austria forced him to abandon the gold standard and institute legal tender paper money. He attempted to replace the land tax by a capitalized redeemable tax on land and an income tax to apply to income from land as well as from all other sources, but he failed because of the strong opposition of the landed interest. From 1872 to 1874 he served as minister of education, resigning over the opposition to his proposal for free and compulsory primary education. His last work was his attempt, begun in 1876, to reorganize the corrupted public finances of Egypt.

LUIGI EINAUDI

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SCIENCE. By etymology the term science is generally applied to any discipline of knowledge or body of systematic principles and more espe-

cially to disciplines whose principles are universally accepted or have reached the greatest perfection, as, for example, the physical sciences. This definition does not permit one to speak of science as a unity but only as a generic name for a number of independent and highly diverse disciplines. Fortunately it is possible to frame another definition based on a historical analysis of the development of the various sciences in human culture; and this definition, which greatly limits the denotation of science, does make it permissible to regard science in a certain sense as an organic unity, expressing the same method in all its branches and manifesting its effects on social and cultural life as a single force. Historically the great development of mathematics and the natural sciences and the subsequent application of some of the features of these sciences to the analysis of social facts reveal a natural community between these branches of knowledge, which does not extend to other disciplines, sometimes also called sciences, such as theology, ethics, metaphysics and philosophy. It is thus possible to limit the term science to the first named group of disciplines and to attempt to characterize the unity of nature and purpose which lies behind them.

The characteristic outlook of the selected group of sciences is not merely the quest for knowledge in any sense of the term but the quest for a certain type of knowledge. These sciences, or this science, may be said to look for knowledge in terms of which man may envisage the future course of phenomena unrolling themselves or capable of unrolling themselves before his perception and on the basis of which he may alter future arrangements of phenomena to suit his practical interests. Science may be defined as a far flung system of knowledge couched in terms which allow it to serve as a theoretical basis for practical technique. It was in practical physical technique that man first came to appreciate the need of a grasp or representation of the universe of perception in terms of fixed entities and relations which could be relied upon to stay put in time. What science has done is to develop this cognitive, or theoretical, moment of technique on its own account, independently of the practical moment of action which in technique follows the theoretical grasp of the situation. The term mechanism which is generally used to characterize the scientific representation is a tell-tale reminder of the identity of the scientific outlook with the cognitive moment of practical technique. Needless to say, the scope of science

is not limited to the theory required by man's immediate practical interests or even his immediate practical perspective, first, because all theoretical research, as the very condition of its utility for practise, must transcend the immediate practical perspective and, secondly, because the amenability of the universe to this quasi-technical or mechanistic analysis has encouraged man to build up a vast structure in which he takes pride for its own sake.

The inclusion on the one hand of mathematics and on the other hand of the social sciences in the same category with the natural sciences requires a certain explanation. Mathematics is often regarded as dealing with the timeless logical world of essences and therefore as belonging in a class quite different from the sciences which deal with the laws of nature. However, the definition of science here given has stressed the character of science as a representation, or schema, for anticipating the future course of phenomena and not at all as a body of laws directly governing reality. And when science is considered as a methodological system of approach, it is obvious that mathematics becomes an integral, although highly specialized, part of that system of approach. The same methodological—as opposed to ontological—interpretation of science is calculated to remove the difficulties in the way of putting the social sciences under the same roof with the natural or physical sciences. In the endless controversies that have been stirred up in recent years on this subject the real problem has hinged on the fact that the natural sciences, conceived as embodying the absolute laws of reality, have been characterized by mechanism and deterministic predictability, whereas people have hesitated to consign the field of human and social sciences on an exclusive basis to ontological mechanism and determinism. But on a methodological interpretation of science, and hence of scientific mechanism, it is not necessary to force all aspects of social reality into scientific mechanism as if it were a bed of Procrustes into which all must fit and nothing hang out. Scientific mechanism may be applicable to social reality so long as there is a static, stable factor in that reality to support it; but the application of scientific mechanism does not ipso facto exclude the existence of other manifestations of social reality not intelligible in terms of mechanism or the existence of other approaches and disciplines which have developed from these non-mechanistic aspects.

These implications will become clearer upon

analysis of the epistemological conditions and limitations governing the scientific approach to reality, as well as of the relation of the scientific approach to other approaches which the human mind can and does take toward the same reality. This type of analysis is popularly branded as "metaphysical" and is regarded as distasteful; but if one accepts the naïve belief that science represents an absolute and exclusive view of reality, it becomes manifestly impossible to speak of the social or cultural relations of science, since everything true is inside science and the false is irrelevant. It is only when it is recognized that science is not all embracing and that it represents but one among several human activities, all conditioned by the structure of the human endowment and by the structure of the universe in which the human endowment functions—only then is it possible to speak of the place of science in human culture, both historically and in the present.

Human experience as a whole may basically be divided into the consciousness or experience of percepts, that is to say, sense images reflected on a perceptual screen, and the consciousness or experience of subjective activity. Correlative with the latter is the consciousness of trans-subjective activity, or activity in other subjective centers, elicited in the fundamental fact of social communication. Both of these types of data—the perceptual and the subjective, or spiritual—are given in the relation of emanating from an underlying reality not present as such in immediate consciousness. In a clarified and reflective human experience it comes to be realized that there is one section or field of this underlying reality for which man possesses only one peephole, that through sense perception. This is the field of inanimate physical reality. On the other hand, as man turns first to the field of biological reality and then to human reality, he observes the development of a second peephole in addition to the perceptual which provides data of a different order. In the biological field the second peephole and its type of data are found only in a very rudimentary fashion: it is just barely possible for man to enter into social communication with animals and to appreciate the existence of a limited factor of subjective dynamic activity in them. But in the human field the second peephole and its data become overwhelmingly important, overshadowing the significance of the perceptual peephole and its data.

In the field of physical experience or reality the regularity of the sense images causes man to

qualify the underlying reality as static and material and ultimately leads him to the constitution of mechanistic schemas as the best way of anticipating the sense images or phenomena which emanate from that reality. Although in loose speech these mechanistic schemas are called the laws of that reality, a faithful examination of the scientific process reveals that they fall far short of the mark. What one actually beholds is a dualism consisting of the shifting panorama of sense experience and a set of scientific schemas seeking to anticipate important characteristics of the sense panorama. The schemas are never confirmed or rejected once and for all in experience but have to be referred to experience as the very condition of their growth and development. All in all one may say that these schemas, never proof against the surprises of future experience, provide an important grip on the future, and one which moreover it seems still possible to extend in many directions.

As one turns to the biological field, one is forced to recognize that mechanistic schemas developed from perceptual data, while still applicable and capable of further development, manifest a certain loss of grip. The ability to extrapolate schemas for considerable periods of time without reference to experience is lessened; the complication of empirical phenomena is so great that schemas cannot be made so comprehensive that they do not omit important conditions. These facts are indeed disputed by many scientists, but only because, sharing as they do the ontological conception of science, they are afraid to admit such evidence lest it be regarded as rendering biological science impossible. On the other hand, a sober philosophic examination of the case would recognize that the loss of grip on the part of mechanistic schemas in biology correlates itself with the revelation of a second type of factor (absent in physical reality), that of dynamic subjectivity.

From the same viewpoint it is only to be expected that in dealing with human beings mechanistic schemas although applicable and relevant would have even less grip than they have in biology. Only a dogmatist would expect a schema of external behaviorism to be applicable with complete prediction to the human individual's outward manifestations. Moreover it must be pointed out in this connection that the field of the human and social sciences is far from being limited to the application of a loose mechanistic physiology or physics to individual human beings. Most of their subject matter de-

rives from psychological acts and acts of trans-subjective social communication. These, while they have a physical-sensory side, by means of which they are identified in space and time, are basically unintelligible without reference to the internal psychological context. An act of economic exchange, the signing of a contract, is of course meaningless if taken as a purely sensory perception. On the other hand, if such acts are perceived in their psychological relation, they may form the material for the application of the same formal type of mechanistic schemas as is utilized in the physical sciences. Economics as a mechanistic science is sometimes said to rival physics in the grip of its prediction as well as in its abstract mathematical development. However, what is forbidden to the physicist is certainly not permitted to the economist or the psychologist: he cannot erect his schema of deterministic prediction into an ontological determinism. For in human and social phenomena it is possible to go behind the scenes of reality (as is not possible in physical experience) and examine into the conditions behind the production of phenomena. Such an examination reveals that the psychological forces which create the phenomena in question by no means behave always in the static and stable fashion necessary to make the resulting sciences completely predictional. The human psyche, which represents a disturbing dynamic factor by reference to the stability of physical experience and material facts, itself breaks up into a relatively stable phase and into a superdynamic spiritual phase, which whatever else it does certainly troubles the stable and regular order of psychological and socio-psychological phenomena.

From this spiritual phase of the human psyche, or rather from the whole dynamism involved in the polarization into two phases, there derive all the so-called "value" activities of man: ethics and the social organization of human activities, religion, aesthetics and even science itself, taken from the purely human and intellectual side. But while science, reflecting as it does the disciplining of the cognitive need manifested in physical technique, develops static or material concepts, the other activities, when they undergo an intellectual development, create concepts of a different order: spirit, ideal, purpose. Since both sets of concepts often point to the same reality, although to different aspects, it is obvious that great care has to be exercised to prevent confusion of thought and intellectual working at cross purposes. This has to be

guarded against not only in the case of opposing disciplines, like economics and ethics, but even more so in the case of those mixed social disciplines—jurisprudence, for example, and other disciplines pertaining to social administration—where the static scientific approach and the normative moral approach have to be utilized alternately by the same person in the same course of study.

On the basis of this analysis of the place of scientific thought and scientific approach in the human psychological endowment it is possible to trace intelligently the historical development of science and its interplay with other phases of culture. At the very outset one is confronted with the great puzzle as to why science should have had such a late development. Although religion, social organization, material technique and even the fine arts have a continuity reaching back perhaps hundreds of thousands of years into the past, the thread of science does not go back more than four or five thousand years at the very most. And even the greatest part of this history pertains primarily to mathematical and astronomical science. As applied to natural and physical phenomena science cannot be said to have become constituted before the seventeenth century; and its era of intensive development dates only from the nineteenth century, from which period, approximately, also dates the development of clearly crystallized scientific methods in the social fields. It is not a question of a slow accumulation of scientific facts in the early stages of culture with an increasing acceleration of progress in the later stages: primitive culture reflected an antiscientific tendency, an inherently false approach, which had to be outgrown before science and scientific progress could begin.

The late development of science finds its explanation in the complexity of the human mental instrument, in the multiple facets of approach toward experience which it contains and in the inevitable confusion in the early attempts to articulate this remarkable endowment of man. The gift of consciousness did not come down from heaven with explicit directions for its use, and anthropologists have therefore wisely remarked that under the precarious conditions of primitive life consciousness was not an unmixed blessing for man. If consciousness extended man's technical grip on the physical world, it did so only in specific concrete problems where man could lean to a great extent on the subconscious guidance of his instinctive endowment.

Removed from this earthly support consciousness operated to spread an atmosphere of fear and hallucination about the outside world—with its inevitable reaction in the development of a sense of intimacy with the fictitious creations of the subjective imagination.

Instead of primitive technique developing rapidly from invention to invention and later breaking up into a specialized theoretical science and an applied science, or technology, one finds in primitive life technique developing in its more ambitious phases into magic, which may be characterized as an illusory technique resting upon a fallacious knowledge. Its leading ideas are often designated under the headings of *mana* and *animism*. The first reflects the inability on the part of primitive man to make a clear distinction in his conscious experience between the subjective and the objective: the magician believes that by sheer effort of will and without spatial manipulation he can constrain not only his own muscles and his own body but the objects of external perception as well, and he believes also that these objects themselves possess a non-mechanical, "mystical" causality. *Animism*, which seems to come at a later stage in primitive thought, after success in the technical manipulation of external phenomena has crystallized the sense of an objective world with static material properties, exists for the savage both in the conception of indwelling spirits, with dynamic and capricious properties, inhabiting all objects—sticks and stones as well as men and animals—and in the belief in disembodied spirits roaming the world at large and manipulating phenomena like a puppet show. It is easy to see how these ideas suggested themselves from psychological and psycho-sociological experience, in which the interest of the primitive like that of a child is more keen and intimate. But the application of such ideas to the physical world could not be more unfortunate in its results. Not only are such ideas basically unsuited to the characteristics of physical experience, but they deprive the mind of the possibility of attaining true ideas by creating the illusion of being confirmed by experience. It is part of the essence of mystical causality that its effects are uncertain and unpredictable, and it is similarly in the nature of spirits that unseen they can always interfere with the plans of mice and men. Thus if a magician's experiments did not produce the material effects looked for, the fault was not ascribed to his theories but to the mystical contamination of some of his materials,

the capriciousness of some evil spirits or the malevolence of other magicians. It took humanity a long, long time to come to the realization that not only were mechanistic principles, principles of spatial causation with entities whose properties stay fixed in time, the ones appropriate to physical experience, but that in problems of detail they alone laid themselves open to verification or rejection in experience, and in case of rejection, to the revision of the detailed structure in the light of the suggestions of experience.

In addition to the vicious circle involved in the fundamental presuppositions behind magic it must be remembered that there was an all important institutional force which served to perpetuate these ideas, although with a different end in view. This is religion, whose historical function has always been to exalt the higher subjective energies of men and to maintain the social fabric by emphasizing the participation of the individual in an invisible world from which the collectivity depended.

Primitive religion of course can scarcely be said to have had a very clear conception of the spiritual, either intellectually or morally. Its intellectual stock in trade represented the same confounding of the objective and the subjective, the material and the psychological, which characterized magic, and its program hardly differed from magic save in its social aims. Religion sought to constrain and wheedle the spirits and invisible forces for the benefit of the group, the magician for the benefit of the individual. At the same time religion as the guardian of social safety became the censor of any new ideas or activities which might conceivably offend the invisible spirits or gods. Thus the religious institution, although always hostile to magic as an illicit individualistic communication with the extraordinary forces of the universe, served to perpetuate the mentality on which magic depended. This relationship continued as late as the Middle Ages, when the scholastic philosophers took an attitude not of condemning the belief in magical powers but of condemning the resort to them for magical aims.

Before a scientific mentality could emerge, there was required a long and slow transformation of the physical and institutional conditions of culture. The accumulated progress of the technical arts, necessarily slow not only because it took place without the aid of science but also because it took place under the shadow of magic, eventually effected a certain translucency in the

intellectual atmosphere. At the same time the progress of social organization, effected with or without a development of religious ideas and always subject to sudden interruptions and reversions as a result of wars, created a class with sufficient leisure and curiosity to carry on disinterested inquiry at least in certain directions. This state of things corresponds to that of the great civilizations of Egypt and Babylonia. In both of these civilizations in the midst of a general magical mentality there existed a highly developed mathematical science, which went far beyond the needs of practise and which above all, whether used in practise or not, was intellectually effective. It is interesting to analyze the sources of this mathematical science, embracing not only arithmetic but also geometry. Both of these phases of mathematical science, which was one day to become the corner stone of the whole vast intellectual transcription of experience, have their roots in technique not only in the sense of representing problems suggested by technique and solutions that may be utilized therein but in the very special sense of being intellectually guided by a skeletonized type of technique. The history of the number concept reveals its roots in concrete numeration: in the telling off of objects in a one to one correspondence against a set of standard objects. Because of the simplicity and uniformity of these operations, the play of cognitive consciousness could follow them and assimilate them in such a manner that it could carry them forward in imagination with full confidence that the results of the imagined action would correspond with the results of physically repeated action. A similar development was operative, although at a much later stage, with regard to the tracing of lines and figures which could be superimposed on concrete objects to determine their size and shape. These too became subject to imaginative mental analysis and gave birth to geometry. The extent of development of numerical and geometrical analysis, once the start was made, depended of course on conditions of leisure and interest in the subject. One is amazed to find that Babylonian priests as early as 2500 B.C. had advanced in the analysis of numerical operations to the point where they were carrying on a regular algebra with solutions of simultaneous quadratic equations in two unknowns. As regards geometry their science embraced at least an implicit knowledge of the properties of the Pythagorean theorem—two thousand years before Pythagoras.

All this extraordinary mathematical development in Babylonia (and the lesser but equally significant development in Egypt) failed to have any rational repercussion on the prevailing general mentality. In Babylonia it may be said to have combined with magical and superstitious ideas to foster an intense development of star omens, or astrology. This curious discipline developed a remarkable core of positive astronomical science within a framework of gross superstition. Both were passed on to Greece and the European tradition after the entry of Alexander the Great into Babylon. The astrological tenets continued to flourish throughout Roman and mediaeval times. They helped to preserve the interest in mathematical astronomy—but at the price of contributing to the degradation of the general mentality.

The type of scientific contribution represented by Egypt and Babylonia has been repeated several times, in China and Japan, India and among the Mayas of North America. It serves as concrete evidence to show that the potentialities of science are not confined to any one people but may properly be regarded as belonging to the patrimony of the whole human race. In actual historical fact, however, only one civilization has been able to produce a fully developed scientific tradition, and this is the so-called western civilization which traces its origin to Greece.

The historic importance of the Greeks from the point of view of science lies in two directions. In the first place, they laid down the program and formal outline for the whole encyclopaedia of knowledge, including not only the positive sciences, which form the subject of the present article, but the philosophical and intellectual disciplines as well. In the second place, they built up and developed to marvelous perfection geometry as a rational and at the same time positive and intellectually effective science, preparing it unconsciously for its vital role in the modern scientific structure and applying it consciously but timidly to the motions of the heavens and to rudimentary problems of mechanics. The relationship of the general philosophic program of Greek thought to the modern scientific edifice is complex. Greek philosophical thought has contributed an element which has gone into the making of modern science and without which science could not have developed as it has. On the other hand, it may also be said that modern science constituted itself by reacting against some of the tenets of Greek philosophical

thought. Finally, it should be noted that the place and meaning of science as a whole in modern life and thought can be understood only by reference to the modern philosophical tradition, basically Greek in character although transformed by a number of forces, of which not the least is the development of science itself. For these reasons a brief glance at the program and outlook of Greek philosophy is necessary.

Under the impact of a number of secularizing and humanizing forces, including the cumulative advance of the technical arts, the decadence of the religious institution in Greece and the efflorescence of the plastic arts and literature, there developed a novel way of looking at the universe and man's relation to it. In place of the mythological stories of the adventures of the gods in heaven and earth, which were hitherto the only vehicle for expressing man's curiosity and wonder at the nature of things, there was now a bold inquiry by human reason without reference to the nominal masters above. This inquiry, which at first embraced only questions of cosmic structure and later included problems of human conduct and affairs, was of necessity speculative, being an attempt to systematize the general features of experience as they presented themselves to the interest of the thinker. It was also dialectical in the sense that each thinker hazarded his own theory or system and attacked that of everyone else. If in the prephilosophic stage of culture mythological beliefs had been propagated under the anonymous banner of collective traditions without the individual's daring to assert his own ideas, now with the awakening of the reasoning faculties of the individual things went to the extreme of individualism and sometimes, under the influence of rhetorical practise at the law courts, to the point of sophistry.

By and large the Greeks did not minimize the importance of experience as the starting point of knowledge. The truth is rather that their general attitude toward knowledge was radically different from that which prevails today. What the Greeks sought from knowledge was in the nature of a theoretical, contemplative *Weltanschauung*, which made no organic distinction of approach between problems of human ethics and problems of physics. The idea of a science that represented power over natural forces and over the course of phenomena and that was to be constituted as a universalization of the theoretical moment in technique was quite lacking. Although the philosophers pressed into their serv-

ice all the accumulated common sense knowledge born of the progress of the arts and occasionally performed experiments to prove disputed points, none of the branches of philosophic inquiry, none of the sciences, was carried on in correlation with the corresponding techniques. These were despised as representing an inferior level of activity having no relation to disinterested knowledge. The only case where there was an attempt to bring together the learned approach and the approach of practise was in the medical sciences, but here the results were relatively barren because the necessary preliminary sciences were lacking.

The good and evil of the Greek philosophic contribution, from the viewpoint of modern science, are well represented in the system of Aristotle, which came at the close of the great philosophic era and which imposed itself on subsequent generations by its confident encyclopaedic sweep of all knowledge. It was characteristic of Aristotle's doctrine that it articulated all phases of reality, all branches of knowledge from physics to "first philosophy" or theology into a single architectonic whole, moved by dynamic teleological principles. These were suggested to Aristotle by his special preoccupation with biology, where indeed there is an inherent justification for a teleological viewpoint, even though such a viewpoint does not provide the type of controlling knowledge of phenomena which modern science seeks; and also by the latent animism involved in common sense knowledge of physical phenomena and embodied in language concepts. The proximity of this viewpoint, for all its intellectual breadth, to the religious mentality of the semibarbarian peoples of the Middle Ages helps to account for the tremendous hold of Aristotle's system on the mediaeval schools of all faiths, Moslem, Jewish and Christian. On the other hand, both the methodology of the system and its alliance with a theological hegemony of thought resting on sacred books made it a powerful encumbrance to the development of physical science in the modern sense.

Aristotle's system and the Greek philosophic contribution in general stood for a dispassionate intellectual interest in physical, natural and social phenomena. They provided moreover a rich store of facts and documentation which outside of physics could be taken over bodily and utilized in a corrected scientific methodology. It is the presence of this theoretical interest and this documentation in the western cultural

tradition and their absence in the oriental cultural tradition which seem to account for the crystallization of science in the West and its failure to develop similarly in the East.

The other important phase of the Greek contribution to science was the constitution of a demonstrative geometry. In view of the implicit kinship between geometry and the mechanistic approach to physical phenomena it seems a bit strange that the Greeks should have failed to make the transition to physics. But the explanation lies in the fact that geometry faces two ways. If by its origins it recalls the world of technique, by its amenability to deductive development it suggests a world of pure eternal truths to be contemplated along with the rest of the cosmological speculative system. Nevertheless, the historian must record two extensions of pure mathematics to physical problems; and while these were too slight to affect the dominant tone of ancient thought, they were important for the future in creating the nucleus of a new tradition. One of these is the application by Archimedes of the methods of geometrical deduction to the principle of the lever and of other simple machines, and it is perhaps significant to note that this occurred during the Alexandrian epoch when the Greek philosophic aversion to technique had receded somewhat under alien influences. The other is the rather curious and timid application of geometry to an analysis of the motions of the heavenly bodies, which was begun by Eudoxos in the time of Plato and completed by Ptolemy about 150 A.D. It is significant that in both systems the natural aim of the geometrical analysis—to chart the heavenly motions and simplify them if possible by changing the point of orientation—was frustrated by the same type of religious and commonsense prejudices as were afterwards to be arrayed against the Copernican theory. The mathematician was thus reduced to combining purely hypothetical circular motions to "save the phenomena," these artificial combinations being endowed subsequently by the realistic imagination with full physical reality. A heliocentric theory propounded by Aristarchus in a form identical with that of the Copernican theory eighteen centuries later was frowned upon by the mathematicians and denounced by the stoic Cleanthes as an act of religious impiety.

As regards the Middle Ages, it may be said that the older view that this long period was substantially barren of scientific achievement still prevails despite the efforts of mediaeval

scholars to rehabilitate the intellectual status of that epoch. The men of the Middle Ages preserved the intellectual heritage of antiquity and made it the possession of a pan-European civilization. But however much they affected the philosophic, moral and political disciplines, they made no significant contribution to the positive scientific phase of the Greek tradition, which they cultivated moreover only with a secondary interest. Even in algebra, the invention of which is popularly credited to the Arabs but which was really begun by the Alexandrian Greeks, the mediaeval contribution was slight, and the main work was left for the sixteenth century. There were, however, a number of practical inventions during the Middle Ages—the compass, lenses, gunpowder and Hindu-Arabic numerals—which were to have a revolutionary effect on both technology and science. It is important to note that side by side with the official scholastic culture, under which the intellectual traditions of Greek thought were resumed but given a religious and otherworldly emphasis, there was a practical, plebeian current, expressing itself in magic and the occult sciences and also, as the slow economic development permitted, in a rational progress of technique. In the architectural arts there was even a groping for the application of mathematics and scientific reasoning to problems of engineering, but the education of the masons was too limited to permit of much progress in this direction.

It is to the turbulent upheavals of the Renaissance that are due both the resumption of the mathematical sciences of the Greeks and their fusion with a practical, technical interest, which constitutes the differentiating character of modern science. The period witnessed two revolutions, brought about by relatively independent causes, and it was on the margin of both that the revival and transformation of science took shape. The first was the cultural revolution, the Renaissance in the proper sense, which was motivated by the desire to escape from the sordid conditions of mediaeval life and return to the glories and beauties of the classical past and which expressed itself in the revival of architecture and the plastic arts under classical inspiration and in the restoration of the monuments of classical literature and learning. The other revolution was economic, produced by such factors as the loss of population as a result of the Black Death and the incessant wars, the closing up of the customary trade routes and other economic and political changes. This revolution expressed

itself in an intense development of commercial and industrial capitalism and was accompanied by a rapid rise of technology and mining, to which moreover the costly and devastating wars of the northern powers in Italy also contributed. It was the synchronism of these two revolutions which produced the new scientific trends. Thus the humanistic Renaissance gave a mortal blow to scholasticism and at the same time stimulated the publication of Greek scientific texts along with literary and philosophic texts, although by itself it did not produce a modern scientific attitude: the closest approach was in the revival of a pagan biological naturalism. But meeting with the current of pragmatic interest emanating from technique it produced for the first time in history a union of theory and practise, mathematics and engineering. In the person of a genius like Leonardo da Vinci all these Renaissance tendencies united in an all embracing talent. Leonardo was at once an all round aesthetic type—architect, sculptor, painter and poet—and an investigator of the scientific, technological type, making important discoveries in mechanics, biology and natural history, which unfortunately did not see the light of day until the eighteenth century. In the lesser but more specialized careers, whose contributions built up the new scientific tradition and the new scientific spirit, there was the same cross fertilization of hitherto segregated cultural trends. Thus the astronomer Toscanelli prepared the charts which were utilized by Columbus and the Portuguese explorers. Writers on metallurgy, like Birinuccio and Agricola, helped to dissipate the fogs of alchemy and prepare the way for a scientific chemistry. The translators and followers of Archimedes were simultaneously mathematicians and military engineers, seeking to extend the Archimedean method to new mechanical problems. The need of increasing the effectiveness of artillery fire led Tartaglia to attempt to solve the problem of the path of a projectile, and he initiated a series of efforts which led ultimately to Galileo's successful solution, with its founding of modern dynamics.

Even the Copernican theory, often regarded as a creation of individual genius, was in fact a product of the trends of the time. The stimulus to the revival of astronomy, which was preserved during the Middle Ages largely through the aid of its disreputable daughter, astrology, came in the fifteenth century with the necessity of drawing up tables to correct the calendar. This had been agitated in vain for four hundred years,

but under the new intellectual conditions revised and accurate astronomical tables were prepared by Purbach and Regiomontanus. Their work in turn called attention to the parlous state of astronomical theory, and it was with this background that Copernicus went to Italy and found, through his humanistic studies of classical literature, the trail of the heliocentric doctrine, which he dared champion as a solution for the astronomical difficulties.

It was not until the seventeenth century, however, that the evolution away from scholastic doctrines and the accumulation of physical discoveries had proceeded to the point where the new science could perceive clearly its own perspective, synthesize its detailed researches and formulate a philosophic program and methodology. The numerous steps in the development of the scientific structure cannot be treated here, but certain generalities on those phases which have a cultural importance should be mentioned. First of all, the new science divorced itself from the unified intellectual perspective which had dominated Aristotle and the scholastics. Physics and astronomy were no longer harnessed in the same logical system with metaphysics and theology. This was the real significance of the struggle for the acceptance of the Copernican theory that was waged by Galileo. The Catholic church, although it constrained Galileo, could not constrain the earth in its motion or the evolution of scientific thought. Today, while scholasticism has been restored as the official philosophy of the church, that philosophy must accept the findings of physical science, which are based on a different approach; the church cannot command science to follow scholastic concepts.

Specifically the new methodology of science made it necessary to view the universe in terms of mechanism, both for the grosser mechanical phenomena and for the more subtle phenomena, such as light, heat, sound. This approach was at first literally and visually interpreted by Descartes and others as implying that the external universe was made up of nothing but extended mass and motion and that physical laws represented only the laws of the geometrical transmission of motions by contact. Almost immediately, however, a deviation had to be allowed in the case of universal gravitation, which operated at a distance, like an occult quality, but with effects so precisely traceable in terms of observable and measurable quantities that it could not be denied admittance into the edifice of science. In the course of the subsequent development of

physics the conception of mechanism evolved far more radically, until today it is nothing more than a metaphor denoting the quest for relations and laws of identity across time. This fact is of importance because for long men tried to join the new science to the rest of the cultural and philosophic tradition by the device of psychophysical (mind and matter) and metaphysical (God and the world) dualism, which the more irreverent abbreviated into a monistic materialism. Only with Kant was the attempt seriously begun to inquire into the relations between the form of science and the conditions of the human endowment, and then it was realized that science could not be considered even in its own plane as a direct and metaphysical view of reality but only as a special and progressive approach to experience.

It was indeed in the progressive building up of the scientific system along its chosen mechanistic pattern that both the experimentalism and mathematicism so characteristic of modern science found their application and meaning. Experiment was no longer an illuministic quest for the mysterious inner secrets of nature; either it represented a methodical cataloging of new phenomena, as in the case of electricity, or more often it was the putting to the test of a deductive prediction of experience. On the other hand, the basic mechanistic concepts put a premium on the deductive analysis of the functional variation of spatial and temporal magnitudes which was supplied by the mathematician. When Galileo worked out the law of gravitational acceleration he was handicapped by the absence of the differential calculus; but thereafter the development of mathematical analysis, initiated by Descartes' fusion of algebra and geometry, was always far ahead of physical needs.

The seventeenth century scientific development, vast and revolutionary as it was, did not succeed in imposing the new program on any field other than physics and astronomy. Chemistry, where the same type of approach, although with a somewhat different starting point, was needed, lagged behind, still following occult ideas derived from alchemy. In the biological field little was accomplished save in descriptive phenomena; and even the discovery of the circulation of the blood, important as it was, belonged to this class. The slowness of progress in these fields no doubt reflects a greater complexity in the problems, but it also indicates the lack of organized social support for the new scientific research. It was not until well into the nine-

teenth century that the universities became active centers of scientific research. Up to that time all research had been fostered by amateurs and by societies of amateurs, the so-called learned societies, which in their modern form arose in the Italian cities of the sixteenth and seventeenth centuries. Occasionally those who advanced the torch of science were members of the universities, but this was the exception rather than the rule. The newer branches of research, far from being actively encouraged by the university administration, were not even represented in the university curriculum.

As for the relations of the new science with the developing techniques of industry, it may be said that collaboration was most intermittent. After the first burst of community of interest in the Renaissance there was little to hold science and industry together until the development of chemistry, electricity and thermodynamics and the rise of the steam engine. The first great revelation of the practical power of science came with the French Revolution, when the chemists and physicists were hired by the revolutionary state to devise new processes and to systematize the weights and measures of the republic.

Of far greater importance during this period were the effects of science on social thought and action. The development of science had been accompanied from the beginning by an emphasis on the realistic, materialistic side of human nature. In the seventeenth century it had been counterweighted by the development of religious and moral thought with its opposite emphasis. In the eighteenth century, however, science became the carrier of a peculiar type of social rationalism—empirical and realistic in emphasis, moral and reformist in aim. The materialism of the French *encyclopédistes* and the subsequent English doctrine of utilitarianism were of this type. Side by side with these there developed a purer type of social science, that represented by economics. Here too the starting point was the desire for a realistic interpretation of human conduct, free from the snares of an abstract and utopian moral idealism. This found its application in a field of social experience which the institutional development since the Middle Ages had surrendered to the free play of materialistic instincts subject only to formal rules of market place exchange. Thus unknowingly social institutions had conspired to create a field of “social physics” in which mechanistic laws would apply, and it was these laws which the new science proclaimed. There was

less solid justification for the belief that in economic phenomena “private vices are public virtues” or that the play of materialistic self-interest works out always for the social good. But under the naïve interpretation of science both principles, the principle of mechanistic determinism and that of a teleological harmony or interests, were proclaimed as consequences of the same science and as resting on the same authority.

The later history of natural science, which begins with the founding of chemistry at the close of the eighteenth century, is difficult to trace in its technical scientific aspects, but its social repercussions are easy to follow. Three sets of phenomena coincide: the uncovering by physical science of facets of experience capable of practical and technical utilization; the flowering of capitalistic industrialism, under which scientific knowledge can be utilized rapidly; and the rise of the modern secular university, in which a dominant place is given to scientific research. Chemistry was from the moment of its birth a utilitarian science and was so recognized by Lavoisier, its intellectual father. It has affected almost every aspect of industry, it has revolutionized agriculture and food preparation, and it has become one of the principal weapons in man's fight against disease. No one would have suspected, however, the role that scientific research was to play in the transformation of power resources through its theories of energy and thermodynamics as well as through the marvelous science of electromagnetism, which not only opened up new methods of power production but led to the totally unprecedented boon of power transmission. Nor would anyone have dreamed that this same science of electromagnetism, which at the beginning of the modern era embraced only two unconnected phenomena, rubbed amber and the magnetic needle, could create a magician's paradise of applications in the fields of communication, lighting, medicine and the like.

In the second half of the nineteenth century the biological sciences came into their own. From a positive practical viewpoint the most significant developments were the rise of an experimental physiology and the sensational discovery of the role of microbes in contagious diseases and in putrefaction. The latter has revolutionized surgery and has been the largest single factor in the success of the modern public health program. It has initiated lines of research in immunity and immunization which are still far from complete but which have continually

yielded rich social dividends "on account." Of similar positive significance is the science of experimental genetics, begun by Mendel in the 1860's but lost to view until the turn of the century. It has put the biologist in a position to breed new agricultural and animal varieties almost as the chemist creates new compounds in the laboratory. It has moreover provided the scientific basis for a program of human eugenics, although such a program cannot be put into operation without an agreement as to the practical social aims, which can be had only in a more rationally directed social organization than exists in most countries today.

Far more philosophic in character was the doctrine of the evolution of species which attracted so much of the energy of biologists during the nineteenth century and which convulsed popular religious beliefs as they had not been convulsed by any scientific event in history. Founded on an induction from paleontological data, which had been patiently accumulated since the seventeenth century, the conception of a natural transformation of species gave a telling blow to that peculiar metaphysical compromise which had developed between scientific and religious beliefs, and which had surrendered the working order of the universe to science but had reserved the creative starting points and the world of souls to the kingdom of God and traditional religion. Under evolution there was little territory left to the supernatural kingdom, so all embracing had the kingdom of nature become. The clash was aggravated by the attempt on the part of Darwin to devise a mechanistic explanation of the evolutionary process in terms of the ambiguous concept of natural selection. Neither Darwin's work nor subsequent efforts on the basis of genetics have been crowned with positive success, and to the writer it would seem that there is a basic incompatibility between an evolutionary conception and a complete mechanistic explanation. But in the high Victorian period of evolutionism success was taken for granted and there developed popular systems of materialistic metaphysics which embraced all knowledge and all experience, from astronomy and the nebular hypothesis to human psychology and sociology, in one imaginative sweep.

The doctrine of evolution had an enormous repercussion on sociology and anthropology, largely, however, because it gave the erroneous impression that all social history could be conceived as a uniform, linear development and

subjected to a simple formula or law. When the smoke had cleared, it was seen that evolution was no open sesame that could simultaneously unlock the doors of theory and practise, of structure and history. The social disciplines fell back on more eclectic methods, and what they appeared to have lost in scientific dignity they more than made up in adequacy to their intricate subject matter. It is a relic of an outworn metaphysical conception of science to suppose that science can be carried on *sub specie aeternitatis*, without reference to practical viewpoints and interests. In the physical sciences a general practical interest is implicit in the very mathematics and methodology of these sciences. But in the social field, where fact and practical action alternate in the consciousness of every individual, a crystallized practical purpose must guide the specific selection of facts if the chase for facts is not to degenerate into sheer dilettantism.

These reflections on the practical character of science are relevant also with reference to the mooted "crisis in science" raised by the theoretical developments of the new physics. Notwithstanding the limitations of method which have surrounded the scientific quest from the moment of its formulation, there is no doubt that most scientists as well as the general public have tended to visualize the fundamental set of scientific concepts in space and time and thus to convert them into an ontology or metaphysics. It was this tendency which was seriously affected by the development of the relativity theories and virtually blocked altogether by the quantum theory. There is nothing remarkable about the relativity theory except that the character of high abstraction which was previously reserved for the mathematician's functional manipulation of the fundamental physical categories and concepts now entered the domain of the physical categories and concepts themselves. The bridge or rather the stairway to immediate psychological experience still remained, just as there always remains the possibility of ascent and descent with regard to the highest reaches of mathematical abstraction. Also, notwithstanding the curious covariant relationships between the spatial and temporal measurements pertaining to moving bodies, the object of science was still the same—the quest for a set of relations whose materials could be supplied in the present and which could be relied upon to predict the character of future experience. What was missing was the simple visual diagram of three Euclidean dimensions and of invariant material

masses as the basis for the more abstract relations. It was this visual diagram which had been identified with physical reality while the more abstract relations were identified with the laws of reality. However, a reference to the nature and movement of the scientific process is sufficient to dispel the belief that such a visual diagram should always attend the march of scientific theory, just as it dispels the presumption of the imagination to visualize numbers as "real" and "rational" entities.

Nevertheless, the realistic imagination had managed to accommodate itself by means of vague images to the paradoxes of relativity, when it was announced that in connection with atomic problems no precise charting of the space and time positions of individual electrons was possible under the human conditions of approach but only a charting within the limitations of statistical averages; and that for similar reasons only statistical predictions of electronic behavior rather than individually governing predictions could be made. The realistic imagination, which had for three hundred years raised the cry of a complete ontological determinism of reality, now raised the cry of a complete ontological *indeterminism* of reality. Theologians felt authorized to revamp the miracles and other *flatus vocis* of religion with the blessing of science; it would not be possible to enter here into a detailed refutation of the fallacy. It may be sufficient, however, to point out that the limited methodological determinism of science, which is all that science has ever been able effectively to establish with regard to physical experience, is in no way contradicted by the recent developments but rather receives a new expression in the statistical formulations with regard to atomic problems. The crisis is not in science but in the realistic imagination which has accompanied scientific work.

This psychological crisis is itself becoming an important factor in the changing social attitude toward science. Both intellectually and practically there are increasing manifestations of disappointment with science. Cultivated, especially since the nineteenth century, with an all embracing passion which recalls the mediaeval devotion to religion, science has not fulfilled the expectations of its devotees. They looked for a final *Weltanschauung*, a revelation of the structure of the universe and of man's place in it; and instead they have found an endless succession of technical mathematical formulae. And in its practical effects science seems even more to fall short of the hopes entertained for it. Men

expected an orderly progress of the arts designed to ameliorate human material conditions. Instead they find the Frankenstein of modern technology with its horrors of war and of technological unemployment.

As an expression of this disappointment many are urging a return to the Middle Ages, which take on all the allures of an Arcadia. But before western civilization proceeds to blow out the candle of science, would it not be fitting to inquire more closely into the causes of the disappointment with science? The contention has here been set forth that science is not and cannot be a metaphysics; it is the expression of one phase of the human endowment. Disappointment is inevitable if that phase be taken for the whole. But, on the other hand, if science is accepted for what it is, its value for the whole is incalculable. Science does not bring a total revelation or outlook upon the universe, but by virtue of its solidity in its own field it makes possible a clarification of the entire human outlook and a rational and directed progress in the development of all human powers. Similarly the technological powers of science, which are a curse when left to develop without reference to human needs and human practical controls, provide the material, for the first time in history, for a sane social and economic organization. Before the advent of science and technology religion despaired of ameliorating the material conditions of men in this world and preached a compensation in a mythical world to come. Science and technology make it possible—if moral and practical development can keep pace—for men to realize the kingdom of God here on earth.

BENJAMIN GINZBURG

See: METHOD, SCIENTIFIC; PHILOSOPHY; POSITIVISM; RATIONALISM; REALISM; MATERIALISM; NATURALISM; GEISTESWISSENSCHAFTEN; LOGIC; FICTIONS; MAGIC; ALCHEMY; ASTROLOGY; MEDICINE; BIOLOGY; EVOLUTION; RELIGION; MODERNISM; RENAISSANCE; ENLIGHTENMENT; LEARNED SOCIETIES; INVENTION; TECHNOLOGY; PROGRESS; CONTROL, SOCIAL.

Consult: Campbell, Norman, *What Is Science?* (London 1921); Enriques, Federigo, *Problemi della scienza* (2nd ed. Bologna 1910), tr. by K. H. Royce (Chicago 1914); Levy, Hyman, *The Universe of Science* (London 1932); Ritchie, A. D., *Scientific Method* (London 1923); Pearson, Karl, *The Grammar of Science* (3rd ed. London 1911); Poincaré, Henri, *La science et l'hypothèse* (Paris 1902), *La valeur de la science* (Paris 1905), and *Science et méthode* (Paris 1908), collected and tr. by G. B. Halsted as *The Foundations of Science* (New York 1913); Barry, Frederick, *The Scientific Habit of Thought* (New York 1927); Cohen, M. R., *Reason and Nature* (New York 1931); Meyerson,

SOCIAL WORK, TRAINING FOR. *See* SOCIAL WORK, section on SOCIAL WORK, TRAINING FOR.

SOCIALISM. The terms socialism, communism and collectivism, which have often been used interchangeably, are ambiguous and ill defined; for this reason they have an exceedingly wide range of specific connotations. Proudhon, who passionately combated communism as understood in his time, was later classed by Heinrich Dietzel as a communist. The Bakuninists in the First International were the original collectivists, but to Paul Leroy-Beaulieu collectivism stood for all varieties of scientific socialism. The term socialism was first used in its modern sense in 1827 in the Owenite *Co-operative Magazine* to denote tendencies opposed to liberal individualism and in the 1830's was applied in both England and France to describe the social ideals of Owen, Saint-Simon and Fourier. With the victory of the Marxian ideology, however, it came to be interpreted in a restricted sense. George Bernard Shaw, for example, understands by socialism "the complete discarding of the institution of private property . . . and the division of the resultant public income equally and indiscriminately among the entire population," a description which would not apply to the social order advocated by Saint-Simonians and Fourierists and would be rejected also by many socialist leaders of the present time. Every definition must fail—as Dietzel and Sombart have conclusively shown—which focuses attention upon external features only and overlooks the central motif of all socialist movements.

Although collectivism has been used as the general concept of which socialism, communism and anarchism are the special variants, it seems wiser to adopt socialism, an expression which has left so much deeper an imprint on the public mind, as the all inclusive term. For the purposes of this article therefore the definition of socialism must embrace the characteristic common to all these ideologies throughout history and to the organized socialist movements of the more recent period. These are: first, a condemnation of the existing political and social order as unjust; second, an advocacy of a new order consistent with moral values; third, a belief that this ideal is realizable; fourth, a conviction that the immorality of the established order is traceable not to a fixed world order or to the unchanging nature of man but to corrupt insti-

tutions; fifth, a program of action leading to the ideal through a fundamental remolding of human nature or of institutions or both; and, sixth, a revolutionary will to carry out this program. The fact can scarcely be overemphasized that no true socialist is satisfied with merely economic reforms but advocates also a distinct educational, ethical and aesthetic policy.

The content of socialism may further be circumscribed if it is indicated what doctrines and movements, to which the socialist label has for some reason become attached, are not to be regarded as forms of socialism. To begin with, the communism which some students discern in certain types of primitive social organization is not a socialist phenomenon, since it represents a natural, organic evolution rather than a conscious effort. Nor is the communism of the early Christians and of some of their later followers a manifestation of socialism. If they rebelled against the existing order, it was to save their own souls rather than to build a new society; and their organization represented a communism of consumption of goods freely given and received, a form of *religiöser Liebeskommunismus* (Troeltsch). Similarly the communistic orders of mediaeval friars were not fighting the world but fleeing from it. The famous Jesuit colony in Paraguay, which flourished between 1602 and 1767, did not attempt to create a better society but was merely an experiment in religious colonization and missionary work among the natives. Organized Christianity, both Catholic and Protestant, has never been socialistic; it has tried to eradicate the worst features of the prevailing system by developing the moral forces of society. The *Rerum novarum* of Leo XIII promulgated in 1891 and the *Quadragesimo anno* of Pius XI in 1931 are of similar purport, except that the later encyclical indulges in a stronger criticism of the existing order. Analogous in spirit was the *Social Creed* announced by the Federal Council of the Churches of Christ in America in 1908; it emphasized humanitarian principles and has been revised in line with newer programs of social planning and control in *Social Ideals of the Churches*, which was approved by the same body in 1932.

In recent years a number of governmental policies have been improperly identified with socialism. One of them is war communism, which has often recurred in history, coupled occasionally with an exalted messianism. An outstanding instance of this is the empire of the Incas in Peru, which was primarily a military

organization serving the interests of its rulers. The glorification of the regulative measures of belligerents in the World War as war socialism was in part a halting apology for a war which members of the Second International supported; such misinterpretation was possible only because of an overemphasis on the externals of socialism. Municipal socialism may in the future become an integral part of a functioning socialist system, but in its present form it is a purely utilitarian program. The same is true of all schemes of planned economy and partial socialization which do not disturb the essential features of capitalism. Nor is the Italian corporative state, which has not been fully realized as yet, a socialist institution. Despite its pretensions at a synthesis of nationalism and socialism German National Socialism is fundamentally a reaction against socialism. Yet some elements in this extremely heterogeneous movement may be regarded as a late offspring of the feudal and romantic type of socialism. Thus Gottfried Feder, an early and still important theorist of Hitlerism, considers the domination of finance capital to be the chief cause of economic distress; he advocates the nationalization of banks and the financing of public works through the issue of non-interest bearing certificates.

Finally, the programs of certain reform groups have sometimes been unjustly interpreted as socialistic. The teachings of a school of leading German professors in the last third of the nineteenth century were designated by their opponents as socialism of the chair merely because they criticized the shortcomings of laissez faire capitalism and advocated its regulation. There is not much more socialism in the economic, sociological and juristic doctrines of the French solidarists, who without rejecting the capitalist system propose to make it more cooperative in character, thereby improving the status of the propertyless groups. A similar judgment should be passed upon so-called Darwinian socialism of Ludwig Woltmann and others, who attempt to base socialism upon the principle of struggle for existence.

Varieties of socialism may be classified according to their ideals of justice, their motivations, their attitudes toward the state and their methods of attaining their ideals. The aristocratic socialism of Plato, of Campanella, of Fichte in his later period, of some of the romantics and of Rodbertus condemn existing society from the point of view of society, not of the individual, in terms of the *volonté générale*

rather than of the *volonté de tous* (Dietzel). The *sum cuique* of Plato is therefore its regulative principle. It is socialism imposed from above which disregards the selfish interests of individuals and tries to establish justice by organizing society in variegated groups. In recent years Othmar Spann, who regards popular socialism as an inconsistent medley of collectivism and liberalism, has sought to revamp such aristocratic socialism in a system which he calls universalism.

Communistic socialism, the oldest of all forms, looks toward the ideal of absolute equality and seeks to express the *volonté de tous*; it appears in practically all periods when masses are living in wretchedness, surrounded by wealth. Its ideal, which represents an unlimited extension of the ideal of the family to the state, can be expressed in the maxim, probably of stoic origin: "From each according to his capacity, to each according to his needs." On the other hand, the socialism which has as its ideal not a mechanical equality of all members of society but rather a potential equality—in the sense of the maxim of Saint-Simon's followers, "From each according to his capacity, to each according to his merit"—has as its fundamental tenet not common ownership but the elimination of all unearned increment. The contrast between these two ideals, which was striking when scientific socialism first emerged, virtually disappeared when Marxism became the dominant socialism of Europe; but after the World War the distinction again acquired vital importance.

Socialism may be motivated by the religious or moral convictions of its advocates or by principles derived from empirical facts claimed to be the source of Marxian socialism and other recent trends or by resentment against the ugliness of capitalist civilization, as in the case of William Morris. Socialist attitudes toward the state differ: state socialism would establish state ownership and would have the state control future production, while cooperative socialism, which distrusts the state and fears the overdevelopment of bureaucracy, would base its system upon the organization of independent producers (guild socialism, syndicalism, industrial unionism). On the other hand, anarchism holds the historical state to be the ultimate source of exploitation and maintains that no reasonable social order can be established without its destruction. Conceptions as to the methods whereby socialist ideals are to be realized likewise vary: experimental socialism claims

that the new social order can result only from new social inventions; evolutionary socialism assumes that the essential elements of the new order are gradually evolving within capitalist civilization; revolutionary socialism maintains that the establishment of the new society can be achieved only by violent uprising; agrarian or liberal socialism regards as the only remedy the elimination of land monopoly, which it considers to be the sole cause of exploitation; jural socialism conceives the main task of the new society as the codification of economic rights, of which A. Menger holds three to be fundamental: the right to the whole produce of labor, to existence and to work.

All attempts to show strictly delimited periods in the development of socialism have failed. There is no positive correlation between the socio-economic surroundings and the type of socialistic theory, for the creative power of great individuals is always decisive. Neither is it true that modern socialism is exclusively scientific whereas the previous forms of socialism were utopian. There are, for example, elements in the thought of Plato, More and Proudhon which express fundamental relations more clearly than do any of the later socialists. It is nevertheless true that there is a dominant tendency in modern socialism to secularize the state completely, to base socialism exclusively on science and to make it a conscious movement of the proletarian class.

PRE-MARXIAN SOCIALISM. The precursors of socialism from antiquity until the eighteenth century worked in a highly religious or metaphysical atmosphere. Certain theories or movements developed during this period, however, show sentimental reactions or ideologic constructions which approach certain aspects of modern socialism. Robert von Pöhlmann has contended that socialism entered Europe in the sixth century B.C. and became the central problem of the Greek world from the fourth century on. Max Weber, on the other hand, has affirmed that the foundations for a socialistic movement were lacking in Greece. It is obvious that the ancient world could not produce a socialism of the modern type, because there were no capitalistic structures but only capitalists eager for gain; small industry prevailed and there was no progressive concentration of industry; there was no labor problem, as the system was based on slavery; and the class struggle was confined to the oligarchic parties. But it is equally true that from the fifth century the disintegration in the

ancient state and the bankruptcy of traditional moral values had reached a point where there was widespread distrust of existing institutions. Dissatisfied intellectuals embraced the surviving traditions of the golden age; Sparta and Athens of the past were admired for their unified social structure. A comedy of Aristophanes, the *Ecclesiazusae*, was a satirical attack upon communist phantasmagorias and radical feminism. But far more important than these symptoms was Plato's *Republic*, in which he laid down a complete system of aristocratic communism. Although Plato's scheme is to be considered not as a utopia but as a genuine revolutionary effort, Platonic communism was essentially different from modern communism and according to Barker is more analogous to mediaeval monasticism. It maintained a rigid class rule based on slavery; its communism was confined to consumption; it repudiated equality; its outlook was not hedonistic but ascetic; it was militaristic and not international. The other products of ancient socialism, the series of utopias exemplified by the *Sun-State* of Iambulos, seem to be purely literary products rather than manifestations of revolutionary thought.

From the tenth century on, popular mass movements developed which were strange combinations of religious and social revolt. These movements, practically universal in the more developed countries of Europe, were the result partly of the dissatisfaction of peasants and partly of the discontent of industrial workers, especially weavers exploited by rising capitalism. As belief in the immediate approach of the Kingdom of God decreased, people became conscious of the antagonism between the equality of men preached by the gospel and cruel reality. A combination of religion and communism became the ideology of the Cathari, the Bogomiles, the Patarins, the Arnoldists, the Albigenses, the Lollards and many other sects. Some preached a moral asceticism, which makes them precursors of Tolstoy; others, like John Ball, expressed vehement class hatred. These movements increased greatly during the Reformation, when revolts broke out in some mining districts of Germany and agrarian discontent assumed a menacing form in other regions. The most stirring religious movements were associated with the Anabaptists, whose doctrine was a kind of anarchistic socialism looking toward equality in Christendom. Their condemnation of the whole fabric of society led to the mass uprising in Mühlhausen in 1525 led by Thomas

vols. (Munich 1925), and *Storia critica del movimento socialista italiano*, I partiti politici italiani, vol. ii (Florence 1926); Angiolini, Alfredo, and Ciacchi, Eugenio, *Socialismo e socialisti in Italia* (Florence 1920); Croce, B., *Storia d'Italia dal 1871 al 1915* (3rd ed. Bari 1928), tr. by C. M. Ady (Oxford 1929) ch. vi; Morato, Juan José, *El partido socialista obrero* (Madrid 1918); Caballero, F. L., *Presente y futuro de la Union de Trabajadores de España* (Madrid 1925); Mertl, Jan, "Das politische Parteiwesen in der Tschechoslowakei" in *Zeitschrift für Politik*, vol. xx (1930-31) 502-19; Hillquit, Morris, *History of Socialism in the United States* (5th ed. New York 1910); Cole, G. D. H., *A Short History of the British Working Class Movement, 1789-1927*, 3 vols. (new ed. London 1932); Beer, Max, *Geschichte des Sozialismus in England* (Stuttgart 1913), revised and tr. by author as *A History of British Socialism*, 2 vols. (London 1919-20). Much material may be found in *Gesellschaft*, official organ of German Social Democracy, published monthly in Berlin from 1924 to 1933; *Sozialistische Monatshefte*, German revisionist organ, published in Berlin from 1895 to 1933; and *Kampf*, journal of Austrian Social Democracy, published monthly in Vienna from 1907 to 1934.

SOCIALIZATION. The term socialization has been employed in its first and widest sense in Marxist sociology. In his account of the historical evolution of society Marx defined the characteristic of the modern development of the productive powers as the progressive socialization of the processes of industry and manufacture. As industrialism advances, it involves a rapidly growing degree of cooperation among the individuals engaged in production. The division of labor is the first form of this cooperation, which proceeds to a second stage with the subdivision of labor in "manufacture," that is, capitalist organization of handwork before the days of machinery, and to a still further stage in the "machinofacture," which begins with the industrial revolution. The workman under both manufacture and machinofacture is increasingly converted from a complete producer with a product of his own into a "detail laborer," whose work has significance only in relation to a cooperative group; while even the separate factories and industries built up on a basis of this productive cooperation come to possess significance only in relation to the wider interchange of products in the economic system as a whole. In the last resort Marx holds that the capitalist system in its final and absolute phase can best be regarded as producing only one congealed mass of commodities possessing a single unified value derived from the combined labor of a single mass of workers whose activity has been completely socialized. This growth of socializa-

tion in the productive processes is forced upon capitalism by the inherent necessities of its own internal processes of development and is at the same time the means of carrying capitalism to its ultimate point and of bringing about its supersession by a socialist system; in the latter the class divisions characteristic of capitalist society will disappear in a classless society corresponding to the completely socialized character of the productive system.

The word socialization, however, is more commonly employed not in this wider sociological connotation, but with certain narrower meanings relating to the actual forms of industrial ownership and control. In this connection it is used in at least three distinct senses, which are nevertheless often confused. In the first place it is employed loosely as equivalent to nationalization; that is, the assumption by the state of the ownership of industry, whether this assumption comes about by direct expropriation of the capitalists or is accompanied by some form of compensation. In another sense the word socialization is sometimes contrasted with nationalization, as it often was among British Marxists before the World War, who used it to mean nationalization without compensation, whereas they regarded the word nationalization as identified with the piecemeal methods of nationalization with compensation associated with the British Labour party. In yet another sense the word socialization has been used to mean something wider than nationalization, as including forms of public or quasi-public ownership other than direct ownership by the state. Thus before the war it was often used to include municipalization as well as nationalization, and sometimes it was broadened to include cooperative ownership regarded as a form of social ownership complying with the requirements of a socialized economic system. Since the war it has been applied also to forms of ownership of industry not directly by the state, but by public boards or corporations established under the authority of the state and amenable to public control and regulation.

With the growing controversies concerning the forms of socialist ownership and control of industry, this last application of the word has become particularly important. Its German equivalent, *Sozialisierung*, was widely used in connection with the discussions of the post-war socialization commissions in Germany and Austria. Both the German Social Democratic group headed by Karl Kautsky and the Austrians led

by Otto Bauer were opposed to direct state management of industries and advocated the placing of socialized industries and services under some form of representative council or commission, including side by side with state nominees representatives of the consumers and producers and sometimes also of the technical and managerial personnel. This question was debated extensively by the first German Socialization Commission in 1919, which worked out a form of organization for the mining industry based on tripartite control by representatives of the workers, the management and the community. The second German Socialization Commission under Rathenau's influence proposed a commission of four parties, including representatives of the managers of local mines, the workers and officials, the consumers and the state. Meanwhile other German writers, notably Rudolf Wissell and Otto Neurath, worked out a plan known as the "economic scheme" for the social control of all industries in accordance with a planned arrangement of production and distribution but without actual public ownership. Kautsky, advocating public ownership although not direct state control, criticized this plan vigorously in his book *Die proletarische Revolution*.

Meanwhile in France the Confédération Générale du Travail had worked out its scheme of *nationalisation industrialisée*, whereby it proposed to exclude the state from an actual share in the control of industry and to hand over its conduct to representative organizations of the producers, technicians and managers, under a form of public control. The guild socialists in Great Britain had developed even more far reaching schemes for the completely functional control of socialized industries and services, and some echo of these proposals was heard in the United States in such projects as the Plumb Plan for the management of the railroads. In Great Britain the miners also elaborated and placed before the Coal Commission of 1919 a detailed project for the socialization of their industry on a basis of public ownership and administration by a council of which the Miners' Federation of Great Britain was to appoint half the members, the other half to be appointed by the state to represent the technical and administrative grades. Under this scheme there was also to be a coal consumers' council, but this body was to be advisory and was to have no actual managerial or administrative functions. The National Union of Railwaymen likewise

presented a plan in less detail for the nationalization of the railways on a basis which would have given the railway trade unions at least half the seats on the proposed managing body; and in the scheme for the coordination of the railways put forward on behalf of the government by Sir Eric Geddes in 1920 it was proposed to give the workers representation on the directorates of the grouped main line railways, which were, however, to remain under private ownership. This offer was rejected by the railway trade unions, which were not prepared to participate in management under private ownership and preferred the scheme for negotiating Whitley councils and for a statutory wages board that was subsequently embodied in the Railways Act of 1921.

It was in connection with the railways that the first sharp difference of opinion on the subject of socialization appeared within the trade union movement in Great Britain. While the National Union of Railwaymen, by far the largest union in the service, advocated a representative council on which the trade unions would have at least half the seats, the Railway Clerks' Association, which enrolls the clerical and supervisory grades, advocated the socialization of the railways in respect of ownership but also supervision by a full time expert board of a non-representative character. This controversy again came to the fore during the tenure of office of the second British Labour government between 1929 and 1931, in connection with Herbert Morrison's bill (which has since become an act as modified by the subsequent National government) for the socialization of London passenger transport. Morrison proposed to place the coordinated passenger transport service, which was to pass into public ownership with compensation to the previous owners, under a salaried expert board and rejected the demands of the trade unions concerned for representation on this body, on the ground *inter alia* that if the trade union claim were admitted, it would be impossible to exclude claims for representation from other groups, such as the municipalities, and even perhaps from the former shareholders. Over this issue an active conflict arose within the British trade union movement, and at the Labour party conference of 1932 further proposals for the socialization of the electricity and transport services were referred back for reconsideration in the light of the trade union demand for representation upon the administrative boards.

It is clear, however, that this controversy applies only to the question of direct workers' representation on the managing bodies and not to the proposed form of socialized undertakings in itself. It is now generally accepted among socialists alike in Great Britain, Germany and France that the actual conduct of socialized industries and services should in most cases be entrusted not to government departments, but to special ad hoc boards or commissions set up under the authority of the state. It is a moot point how far these boards or commissions should be representative of the actual workers engaged in the various services or of the consumers or of any other special groups, and further how far they should be amenable to political control. On the first point British opinion has commonly rejected the plan favored by the German socialists immediately after the war, of giving representation to consumers' groups on the managing boards, on the ground that boards consisting partly of producers' and partly of consumers' representatives would be likely to take an unduly sectional point of view and to prove inefficient in the business of day to day management. The trade unions continue to press hard for direct producers' representation on the boards, but in some quarters a distinction is drawn between two bodies—a small, full time managing board of experts formed on a non-representative basis and a wider council or commission of part time members, with power to override the smaller board in matters of policy, on which the workers would be strongly represented. These two bodies would correspond to some extent to the board of directors and the "council of oversight" of a German joint stock company.

On the question of political control there have been strong differences of opinion. The socialists are for the most part in favor of the appointment of managing bodies by the state, even if the state acts to some extent only as a ratifying body for nominations made by outside groups. The state, it is held, should have the right of ultimate appointment and dismissal. Most socialists also hold that the boards or commissions of socialized industries ought to be responsible to a minister and to the cabinet, and that this is especially necessary if socialized services are to be brought together as parts of any comprehensive national economic plan. Non-socialists, on the other hand, even where they admit the necessity of some measure of socialization of any particular industry or service, generally wish to

go as far as possible toward excluding all forms of political interference and to retain as many of the features of private enterprise and business management as they can. Thus in Great Britain the British Broadcasting Corporation and the Central Electricity Board, both statutory bodies set up for the control of services under public authority, are kept as far as possible outside parliamentary or governmental interference. Both these bodies, it should be noted, although they are definitely forms of socialization, were established by Conservative governments. In the case of the London Passenger Transport Act the Labour government's proposal that the managing board should be appointed by the minister of transport was altered when the bill was taken over by the national government into a scheme whereby the members of the board are appointed by a non-political body of trustees so as to exclude all forms of political interference. Thus the dividing line between socialist and capitalist schemes of socialization seems to depend mainly on the degree to which political intervention in the affairs of the socialized industries is admitted.

The illustrations given above are of course instances in which certain particular industries have been more or less completely socialized within a system under which the great mass of industries continues to be conducted under conditions of private ownership and control. In many countries there has been since 1928 a considerable advance of state control over industry and even of positive socialization of particular industries or services. Apart from Soviet Russia this process has gone furthest in Germany, where even before the depression the state had already become a partner in a large number of industrial and similar enterprises and where during the depression state participation in private industry advanced much further. This was especially true as the financial difficulties of the banks, the steel industry and various other industries and services compelled the state to step in and provide them with fresh capital, while assuming a large share in their actual control. The German railways were indeed in form denationalized under the Dawes plan of 1924, as the Italian railways were denationalized by Mussolini. But even denationalized railways remain necessarily under a large measure of state control, so that the change is in the form of a transfer from direct state management to management through a public utility corporation rather than from socialization back to private

enterprise. It is even said that the British railways under the Railways Act of 1921 are already more than half nationalized, as the Bank of England and most other central banks are more than half nationalized, although their ownership remains in private hands. In Great Britain even the coal industry, while remaining privately owned, has been brought under a form of state control in the shape of a compulsory cartel, largely on the German model.

There is, however, a wide difference between the extensions of state control in these forms or even the complete socialization of certain particular enterprises and the complete change of economic system which the socialist idea of socialization envisages. Thus in Soviet Russia, where alone socialization has assumed a definitely socialist form, although all industries were not taken over at once, all basic industries passed speedily into the hands of the state; small scale enterprise has been progressively reduced in scope under the two Five-Year plans and is in process of gradual elimination. Moreover a real progress has been made with the socialization of Russian agriculture, partly through actual state farming but mainly through collective farming under state control. Communists regard this policy of socializing small scale industry and peasant agriculture as vital to the completion of socialism in Russia, because they hold that the socialist attitude of mind can be developed only under conditions of socialized economic living. The socialization of a country in their view is far more than the socialization of its industries; it involves the radical socialization of the entire way of life of its people.

In other countries where peasant systems are strong socialists, in their endeavor to secure an adequate following among the masses, have been far readier to promise the peasant immunity from interference with his holding. The French socialists, for example, have repudiated all idea of bringing the land under any actual form of collective cultivation. The German socialists have been divided on this issue but have regarded the collectivization of agriculture as coming, if at all, only late in the process of socialist evolution. To whatever school of thought they belong, however, socialists think at least in terms of the progressive socialization of all major industries and services as productive agencies and contemplate the state control of such industries as are not directly socialized through the socialization of the processes of marketing and purchase of materials. This form

of socialization, whether achieved directly under state auspices or through the recognition of the cooperative movement as an agency of socialization, is regarded as indispensable in order that the socialist state may be able to undertake and carry through a comprehensive economic plan upon a national scale as a foundation for collective arrangements with other countries for the interchange of goods and services. Until recently socialist thought, except in Russia, was concentrated mainly upon the problem of socializing particular industries, with the idea of making a beginning with certain of the basic industries and services, such as coal, electricity and the main forms of transport. But of late two factors have combined to widen the socialist conception of the immediate requirements of the policy of socialization. In the first place, a growing number of capitalist industries have fallen into difficulties which seem to demand some form of collective reorganization; and in face of the reluctance of these industries to reorganize themselves or because of their lack of the necessary powers there has been an increasing tendency among socialists to insist that the state ought to assume control rather than leave them in private hands after reorganization. This applies to such industries as iron and steel, ship-building, engineering and textiles. Secondly, the adoption and partially successful execution in Soviet Russia of the first Five-Year Plan have had a notable influence on all phases of economic opinion in other countries. They have induced non-socialists to set to work on schemes whereby national planning can be introduced on a basis of continued private ownership of industry; and they have led socialists to think less in terms of the socialization of certain particular industries and services and far more in terms of the assumption by an incoming socialist government of powers wide enough to enable it to embark simultaneously on measures of socialization over a very wide field, and to apply drastic forms of state control to those industries left for the time being in private ownership. Above all, a growing body of socialist opinion has held that the first step toward a constructive introduction of socialism by other than revolutionary means must be the complete socialization of the banking and financial system, including not only the central bank but also the deposit banks and the other leading financial agencies concerned with the provision both of short term credit and of long term capital for investment. This socialized control of the financial machine has been increasingly re-

garded as the key to the entire process of socialization in industry as a whole.

The core of meaning common to all these senses in which the term socialization has been used goes back to the wider Marxian use; for basic to all the plans and ideas is the conception of a social system developing steadily toward a higher degree of integration, which brings with it a growing socialization of the processes of production and therewith of the services of the actual workers, manual, technical and administrative. The socialization of any particular industry or indeed of industry as a whole is thus regarded not as a deliberate and artificial creation, but as the realization in the field of economic policy of the inherent necessities of the general course of historical evolution in the modern world.

G. D. H. COLE

See: COLLECTIVISM; INDUSTRIALISM; SOCIALISM; GUILD SOCIALISM; SYNDICALISM; FABIANISM; GOVERNMENT OWNERSHIP; GOVERNMENT OWNED CORPORATIONS; MONOPOLIES, PUBLIC; NATIONAL ECONOMIC PLANNING; STABILIZATION, ECONOMIC.

Consult: Ströbel, Heinrich, *Die Sozialisierung, ihre Wege und Voraussetzungen* (2nd ed. Berlin 1922), tr. by H. J. Stenning as *Socialisation in Theory and Practice* (London 1922); Kautsky, Karl, *Die proletarische Revolution und ihr Programm* (3rd ed. Berlin 1932), tr. from the 2nd German ed. by H. J. Stenning as *The Labour Revolution* (London 1925); Bauer, Otto, *Der Weg zum Sozialismus* (Berlin 1919); Wissell, Rudolf, *Kritik und Aufbau* (Berlin 1921); Germany, Sozialisierungskommission, *Bericht . . . über die Frage der Sozialisierung des Kohlenbergbaues vom 31. Juli 1920* (Berlin 1920), tr. as *The Socialisation of the Coal Mines in Germany*, International Labour Office, Studies and Reports, ser. B, no. 4 (Geneva 1921); Cole, G. D. H., *The Next Ten Years in British Social and Economic Policy* (London 1929) chs. vii-viii; Morrison, H., *Socialisation and Transport* (London 1933); Confédération Générale du Travail, *La nationalisation industrialisée* (Paris 1919); Webb, Sidney and Beatrice, *A Constitution for the Socialist Commonwealth of Great Britain* (London 1920); Laidler, H. W., *A History of Socialist Thought* (New York 1927) ch. xxix; Neurath, Otto, *Wesen und Weg der Sozialisierung* (Munich 1919); Cripps, Stafford, and others, *Problems of a Socialist Government* (London 1933); Cole, G. D. H., "The Essentials of Socialisation" in his *Economic Tracts for the Times* (London 1932) ch. xiii.

SOCIETY may be regarded as the most general term referring to the whole complex of the relations of man to his fellows. In an attempt to arrive at a more precise definition the present article will discuss the main trends of social thought in the West as they bear on the concept.

In the Greek language there is no actual

equivalent of the English word society. In so far as man was thought of as anything more than a biological organism he was, in Aristotle's phrase, a "political" animal, that is, he was thought of as participating in the life of a *polis*; essentially his membership in the *polis* constituted his humanity. There is no modern institution corresponding exactly to the *polis*. Like the modern state it was a territorial unit and as such it held jurisdiction over all residents within its borders; but its scope was far broader, for it combined state, church and society. Only the family and the individualistic aspect of economic acquisition were to a certain extent outside its domain. They were regarded by the Greeks as of secondary importance largely because the individual did not in the modern sense constitute a being with his own independent aims and values, apart from and even potentially in opposition to the consensus in which he participated in the *polis*. Plato carried these principles to their fullest logical development.

Later Greek thought, concurrent with the actual breakdown of the *polis*, developed a far more individualistic conception of social life. The individual, especially in the stoic doctrine, had an independent position of his own. On the other hand, the objective law to which he was obliged to conform was no longer that peculiar to his native *polis* but expressed the natural order of the whole universe. With this cosmopolitan conception there became fused the developing doctrines of the Roman law, which, while possessing essentially the same objective and superindividual conception of the *polis* as the Greek theories, from a very early date left room for a jealously guarded sphere of private interest, untouched by public authority, on the part of the individual paterfamilias. The fusion of the two made possible the later Roman stoic conception of the civilized world as constituting a single world empire, the expanded Roman *polis*, comprising a rigid legal framework of order within the limitations of which individuals were free to pursue their private interests without let or hindrance. The final extension of Roman citizenship to all freemen of the empire completed the institutional development corresponding to the theory. The whole conception rested on a rigid dualism of the sphere of public concern, which was conceived as a unit as in the original *polis*, and the private sphere of individuals, in which they were thought of as essentially independent, entering only into contractual relations with one another. Local and functional groups had only a

Ch'ien was qualified for this task by extensive travels over the empire, begun at the age of nineteen, and by his official position, which gave him access to the imperial archives. In 104 B.C. he took an active part in the reform of the calendar. In 98 B.C. he unwittingly offended the throne by pleading the case of a young general, a victim of adverse circumstances. For this the historian endured the humiliating punishment of castration; for the remainder of his life he was employed as a secretary and had scant time to complete the history. During the first three centuries of their existence the memoirs were not known to biographers as the *Shih chi*, but as the *T'ai-shih-kung shu* (Book of the grand astrologer). In this work of 130 sections, covering the period from remote antiquity to the first century B.C., the material is arranged under five broad categories: imperial annals; chronological tables; treatises (on music, rites, astrology and so forth); annals of feudal families; biographies of representative men. In the latter the personality and literary skill of the historian stand supreme. Already in the first century A.D. 10 sections were reported as missing. Others were supplied by less skilful hands, not necessarily with intent to deceive, but in order to bring to date what was regarded as a standard history. The historian's original plan was to end the narrative in 122 B.C., and in any case it is hardly likely that he carried it further than 104 B.C.; hence events that must be ascribed to 68, 30 and even 20 B.C. are obvious interpolations. The fact that the *Shih chi* is largely a compilation of ancient sources, whose original texts were only slightly altered, enhances its value as a historical document. No nation of antiquity has a history in which the facts are more scrupulously handled or which is written from a broader social viewpoint; and there is none more convincing to the modern reader.

ARTHUR W. HUMMEL

Works: *Shih chi*, 47 sections of which have been translated into French by Édouard Chavannes as *Les mémoires historiques de Se-ma Ts'ien*, 5 vols. (Paris 1895-1905). Several sections have been translated into English by Herbert J. Allen in Royal Asiatic Society of Great Britain and Ireland, *Journal* (1894) 269-95, (1895) 93-110, 601-15. Chapter cxxiii has been translated by Friedrich Hirth in American Oriental Society, *Journal*, vol. xxxvii (1917) 89-152, reprinted (New Haven 1917).

Consult: Chavannes, Édouard, Introduction to *Les mémoires historiques de Se-ma Ts'ien*, vol. i, ch. i; Warren, G. G., "Chavannes' Edition of Ssu-ma Ch'ien" in Royal Asiatic Society, North China Branch, *Journal*, vol. xlvii (1916) 12-38.

SSŪ-MA KUANG (1019-86), Chinese statesman and historian. Ssü-ma Kuang served as minister of state under the Sung and was head of the party which supported tradition in learning and in politics. He was opposed to the social reforms proposed by Wang An-shih and retired when the latter became minister. He continued his political activities, however, and after the death of Emperor Shen-tsung in 1085 returned to power and immediately began to reestablish the traditional regulations and institutions, in the hope of restoring order to the country and eliminating the confusion caused by the reforms. As a politician Ssü-ma Kuang is one of the most representative personalities during the Sung period of the Pleiad Hsing-Li school, composed of neo-Confucianist statesmen and philosophers through whose efforts Confucian theories triumphed in politics, literature and national thought.

Ssü-ma Kuang was also one of the foremost Chinese historians. His *Tzu chih tung chien* (abridged translation in French by J. M. de Mailla as *Histoire générale de la Chine*, 13 vols., Paris 1777-85), a vast compilation of the history of China from the fifth century B.C. to 960 A.D., is the first really homogeneous and complete study of its kind. Typical of the Sung period, an epoch of systematic, generalizing research and synthesis, this work was intended as a guide to the correct principles of government. It had a wide influence and was imitated and continued by numerous authors.

G. MARGOULIÈS

Consult: Wilhelm, R., *Geschichte der chinesischen Kultur* (Munich 1928), tr. by J. Joshua (London 1929) p. 29-31; Hirth, Friedrich, *The Ancient History of China* (New York 1908) p. 264-68.

STABILIZATION, BUSINESS. *See* STABILIZATION, ECONOMIC.

STABILIZATION, ECONOMIC. The persistence of sharp fluctuations in economic activity, marked by wide swings in prices, profits, employment and income to nearly all classes of the population, has in recent years increased the discussion of proposals for economic stabilization and the trial of measures to achieve it. Cycles and crises have of course characterized the business order from the beginning. The persons most severely affected have always sought relief and have been ready to listen to proposals for preventing the recurrence of dislocation. But the climate of opinion in earlier

days helped to stifle the complaints. Orthodox theory held that the economic order was automatically self-adjusting if calculated interferences with its processes were avoided. The business cycle and the recurrence of crises were not recognized as normal accompaniments of the mores of production and exchange. In a youthful and expanding capitalist order the natural optimism of business opinion prevented the expectation of another severe depression, once prosperity had returned. Later study of the defects of the system, particularly the development of business cycle theory, somewhat changed authoritative doctrine.

In addition the number of persons affected by depression was increased as modern capitalism brought a greater proportion of the population within its orbit. A larger part of production was carried on in factories; more persons were employed in them as well as in establishments for commerce, transportation and finance. Fewer farmers were self-sustaining; the majority came to depend on industrial and urban markets. The credit system, fostering a growth of debt both for long and for short term, came intimately to affect the welfare of nearly everybody. Any disturbance to the industrial or financial complex now has a far more serious effect on the population at large than in the days when industrialism and banking were islands in the sea of an older and more stable culture, and when those who suffered in its spasms could more easily find opportunity in newer and less exploited areas.

The internal development of the industrial order itself has moreover intensified the effect of fluctuations of activity in a number of ways. For example, it is established by statistical study that those industries which make and distribute perishable consumers' goods suffer less variation in volume of business than those which produce durable consumers' goods or capital goods, especially of the durable type. With the advance of technology and the rise in the number and variety of articles manufactured for the market a larger proportion of activity is necessarily devoted to making durable consumers' and capital goods. At a comparatively low level of material culture, where food and clothing constitute a large part of the consumers' budget, there is less opportunity to create a great industry for the manufacture of such goods as automobiles. As production becomes more mechanized and distribution covers more extensive areas, the manufacture of capital equipment for factories

and transportation agencies naturally expands. Again, as a population becomes urbanized the importance of the construction industry and of the various supply industries dependent upon it is enhanced. Construction, like other capital and durable goods industries, suffers wide fluctuations. Thus whereas variations of economic activity used to be merely uncomfortable, in an advanced nation they are almost calamitous.

An influence increasing the pressure for stabilization is the larger role played by savings and capital investment, which are the natural accompaniments of large scale enterprise and finance. There are more rentiers dependent upon steady income, more universities, hospitals and the like—with larger staffs of employees—largely supported by the income of endowment funds. Savings banks, insurance companies, building and loan associations, mortgage and investment companies, become the guardians of immense capital funds and the source of security and advancement to large classes. Even commercial banks, which normally supply nine tenths of the circulating medium through their loans and deposits, have become more dependent for their solvency on the stability of earning power of long term securities as well as of short term credit. Automatic adjustment to wide fluctuations of commodity prices and production requires the free and unimpeded movement of interest and rent as well as of other prices; capital deflation may be necessary to create a new equilibrium on which revival can be based. But the immense social and political power surrounding the capital institutions naturally strives to protect the stability of capital income instead of yielding to the pressure for adjustment, whether of earnings or of principal. Thus a need for general stabilization becomes more evident.

Growth of the need for stabilization has been accompanied by the development of institutions capable of exercising some economic control. Labor organizations, becoming more widespread with the extension of machine industry, exercise an influence over wages, hours and conditions of employment. Large corporations, quasi-monopolies, trade associations and the like have more power over prices, production and commercial policies than the small competitors characteristic of a primitive capitalism. The banking system, with its central banks, is able to try experiments in credit policy. All these and other groups bring pressure on political government to assist their efforts by economic activity

of one kind or another. Projects for stabilization are more viable than in the days when the economic system was more atomistic and resistant to conscious control from any source.

Early efforts at stabilization are in the nature of the case partial ones aiming to find a refuge for particular groups amidst the general anarchy rather than comprehensive plans for stabilizing the entire industrial order. Investors in long term securities and mortgages have long attempted to stabilize their earnings by contract, as have real property owners through contractual rents. No matter how much competition exists in capital and real estate markets, contractual rights tend to retard price changes. An industry able to achieve some approach to monopoly will strive to limit the disturbing effect of competition in many ways; it will attempt especially to raise and sustain prices, limit output or divide the market. In addition to the horizontal organizations typified by cartels and trade associations which engage in these practices, there arise vertical combinations which aim to enhance the power and security of owners by extending operations backward toward raw materials and forward to the ultimate consumer or by the stimulation of a complex of by-product industries to buttress the main process. Such developments are comparatively old in the stabilization movement. Labor organizations in their turn have tended to sustain wage rates as long as possible even under depression, to limit apprenticeship and build up benefit funds for unemployment. Foreign competition has been excluded, by the influence of both capital and labor upon government, through protective tariffs and immigration restrictions as well as more recently through import quotas, currency depreciation and other trade barriers. Farmers' cooperative marketing associations have attempted to stabilize crop prices by controlling the markets for given commodities, storing surpluses and exercising collective bargaining. Railroads and public utilities have achieved a substantial measure of price stabilization through public regulation. Indeed the economic history of the past half century might well be written around the central theme of the efforts of various competitive groups not only to enhance but to stabilize their own rewards against the risks of a generally anarchic system.

In addition there have been made efforts at partial stabilization which are defended by social theory on the ground that they contribute to general stabilization. Social insurance of all

kinds is based on the assumption that it protects the more defenseless members of society, who belong to groups unable to obtain security by stabilizing their own incomes; for example, workmen's compensation, old age pensions, minimum wage laws. Unemployment insurance is defended not only by this argument but by the contention that it helps to soften the impact of depression by sustaining the purchasing power of labor in bad times. The theory of long range planning of public works is directly aimed not merely at stabilizing the construction industry itself but at helping to stabilize the system as a whole through the effect of construction activity upon other industries. There is an even larger volume of economic experiment and literature relating to the project of stabilizing prices in general through central banking policy or the control exercised by governments over currency and credit. There are the many attempts at agricultural stabilization to protect farmers against the extraordinarily wide price swings consequent upon the relative intensity of competition among agricultural producers and the relative inelasticity of the demand for their products. These projects too are defended by the argument that in an order in which so many other prices are stabilized in one way or another stabilization of farm prices will help to alleviate price disparities, maintain economic equilibrium and sustain general purchasing power. The same justification has become generally used for all types of restriction of production and price control in specific situations, like those embodied in valorization plans for raw materials, such as rubber, coffee, sugar and copper, and in industrial cartels and trade association activities. One of the most striking recent developments in partial stabilization assumed to be in the general interest has been the use of government credit to prevent deflation of capital, as in the Reconstruction Finance Corporation in the United States, which makes advances of public credit to banks, railroads and insurance companies threatened with insolvency.

Much adverse criticism has been directed against partial stabilization of these varieties. First of all, the attempt to stabilize prices in any one market may be unsuccessful because of the inability to control the output of all potential competitors. It is difficult to obtain agreement and honest fulfilment of agreement from all concerned. When prices go up as a result of output restriction, production is likely to be enlarged by recalcitrants, so that prices tend to fall again

Second, if output restriction and price control are even partially successful, they may result in such a diminution of the volume of business that the earnings of the industry concerned suffer more than if no control had been attempted. From the point of view of a general economic equilibrium the prices which are successfully stabilized may be the very ones which ought to fall if production is to be stimulated. Thus mechanized industries controlled by large corporations attempt during periods of declining demand to hold up prices and diminish output, but this intensifies the general decline by reducing purchases of raw materials and new capital equipment as well as by increasing unemployment. It is argued that social devices to maintain the purchasing power of labor during depression prevent a deflation of labor costs which would tend to stimulate employment. Also if unemployment compensation is paid from reserves built up during prosperity, the sale of the securities to obtain cash may depress capital markets at the very time when the fall of capital values is endangering financial institutions and helping to prevent new investment which would bring revival. If the compensation is paid from public funds, the money must be raised by taxation or must be borrowed; and either course may discourage new investment or raise costs of production.

Monetary and credit policies which aim to increase prices are likely to be ineffective at the trough of the depression, when they are most needed, because of the prevailing lack of confidence and the reluctance of banks to lend and of all to spend money and take risks. When inflationary policies do take effect, they are likely to become politically or economically uncontrollable and to lead to another crisis. It is uncertain also whether a general rise in prices successfully induced by expansion of currency or credit may not in the end enhance price disequilibrium by acting unequally on various kinds of prices. Expansion of public works is difficult to achieve promptly and in sufficient quantity to come anywhere near counterbalancing the decline of private construction. The larger it is, the more it endangers public credit. Governmental salvage of private long term debts may prevent an essential capital deflation or may, if this deflation cannot be avoided, saddle the government with the losses of private capitalism. In any case it tends to maintain the most inflexible elements in the price structure.

Not all these arguments against stabilization

projects are necessarily sound; some are mutually inconsistent on any theory which locates the cause of the trouble in a disequilibrium of prices and incomes. It may, for instance, be good public policy to maintain agricultural prices and stabilize wage earners' incomes while allowing prices of many industrial products to fall and while permitting capital deflation. But all these contentions together serve to emphasize the point that uncoordinated efforts at stabilization made severally by different groups in their own interests or even efforts made by government in the interests of separate groups may easily make the general situation worse instead of better. They may succeed in places where they ought to fail or fail where they ought to succeed; they may emphasize existing disparities of prices and incomes or temporarily solidify fundamentally unstable situations and so bring worse trouble in the end. In a competitive order, depending on the incentive of private profit, partial stabilization is likely to turn out to be a mere transference of the competitive struggle from small units to large groups and aggregations, among which economic warfare is even more disastrous than among small and weak competitors. This is especially true when each aggregation attempts to safeguard itself by limiting its output, and the net result is therefore a diminution of the means of life for all.

Belief that stabilization in order to be successful must be general rather than partial has grown rapidly in the past few years and has given rise to schemes for economic planning. Under this guise some of the older developments have been refurbished and tried on a larger scale than ever before, especially in the United States. The Swope plan, for instance, framed originally with the electrical equipment industry in mind, was recommended by its authors as a plan for other industries as well. This involved an organization of all the manufacturing units in the industry in a single association, setting maximum hours and minimum wages for the industry, establishing unemployment insurance and freed from the restrictions of the antitrust laws in order that it might establish fair trade practices. A plan put forward by the United States Chamber of Commerce involved some of the same features but in addition recommended the setting up of a national planning council by private industry to co-ordinate the efforts of the various groups. These and similar plans put forward by industrialists were criticized mainly on two grounds: first,

that they offered little or no participation in the administration of industry to organized labor in the form of unions independent of employers; second, that they did not visualize a sufficient participation in planning by the government, which would be necessary as a protection of the general interest, as a means of enforcing the decisions of the various industries upon recalcitrant members and as a protection of the consumer interest against unduly high prices. The Swope and Chamber of Commerce plans, with certain modifications, formed the basis of the organization attempted under the National Recovery Administration. This added, in legal formulae and in some features of actual organization, government enforcement and protection of labor and consumer; but such provisions resulted in relatively little concrete accomplishment.

Certain provisions of numerous planning schemes as well as of some of the codes adopted under the N.R.A. were calculated to limit the utilization of existing equipment in the industry and also to limit the investment of new capital in machinery and plant, on the assumption that the industries were overequipped to supply a normal demand. Nevertheless, questions were raised as to whether this assumption was true. Would not the demand be capable of increase if prices were sufficiently lowered? Could not prices be lowered without low wages or long hours if volume of production were increased, thus decreasing unit overhead costs, or sufficient capital deflation brought about reduced fixed charges or production were concentrated in the more efficient plants and the high cost establishments were either eliminated or made more efficient? What relationship did the calculation of overequipment bear to the inclusion of obsolete and high cost units? Sufficient information, whether of an accounting, statistical or engineering nature, was not at hand to provide reliable answers to such questions. Without this information, and decisions of public policy made in the light of it, it was impossible in practice to distinguish planning and stabilization from the habitual behavior of cartels and trade associations seeking to limit production in the interest solely of immediate profit. General limitation of new investment was of particularly dubious advantage at a time when the industries making capital goods were especially depressed and accounted for a large proportion of the prevailing unemployment. The resulting stabilization or increase of prices of manufactured goods also

tended, first, to maintain the price disparity between agricultural commodities and industrial products, canceling out the increases achieved by limitation of crops; second, to raise the cost of living as wage earnings were increased; and, third, to increase the cost of capital goods themselves, which were already too high in price to encourage new investment.

In view of difficulties like these numerous theorists of economic planning have pointed out that there is a wide gulf between the aim of stabilization of specific prices by specific industries, effectuated as a rule by limitation of output, and the aim of a generally stabilized and progressive advance in production for the purpose of a fuller satisfaction of human needs. Economic planning in order to increase the means of life for all must have a general program and must plan at least nationally rather than by separate industries. It might sanction decreases in output for certain industries in which conservation of limited natural resources was important or in which a genuine overproduction existed regardless of the selling price, but it would be obliged to seek increase in output for industry as a whole. Far from freezing the existing price structure, it would have to seek a better balance among various classes of prices and incomes by reducing some prices, stabilizing some and perhaps increasing some. These interrelationships would have to undergo continual change in a dynamic system as technical advance reduced costs unequally and altered habits of consumption, as some goods became more scarce and others became more plentiful, as some industries grew while others declined. Such planning might find it disadvantageous even to attempt to stabilize "the price level" as an average; the essential increase of general purchasing power might be easier to bring about through allowing most prices to fall gradually as technical progress reduced costs and enlarged supply, rather than entirely through raising wages and other money incomes. National economic planning with social purposes would also be obliged, even if it restricted overinvestment in certain industries or at certain times, to encourage expansion of investment in other industries and at other times; for without a steady growth of capital resources on the whole a steady increase in output and consumption is inconceivable. Sound stabilization would have to seek to establish not a static balance but a moving equilibrium.

A similar logical gulf exists between national

planning in the sense of exclusive nationalism, or self-containment, and planning which takes into account the interest of the various populations in a thriving international exchange of goods and services. Planning for stabilization on an exclusive national basis is analogous to the attempt of separate industries to stabilize their own prices and control their own output. It proceeds by a series of restrictions, such as tariffs, quotas and embargoes, the net effect of which is to raise costs and prices, decrease the volume of activity and output and thus diminish real incomes all round. Seeking to stabilize in particular it aggravates the general causes of depression and instability. It represents merely the transference of competition from smaller units to large national aggregates. When, as is the case with most nations, the physical basis for self-containment does not exist within the national boundaries, economic imperialism is intensified and even a direct motive for wars of conquest provided. A type of national planning, however, which is animated not by the desire of exclusive groups of profit seeking producers to safeguard their domestic markets against foreign competition but by a national purpose of supplying the domestic population with larger quantities of goods would seek not to diminish imports but to enlarge them. It would set out to buy abroad those desired articles which were most scarce at home or could be made at home only at a higher cost and would sell in exchange those things which it possessed in greater abundance or could manufacture more cheaply than others. Such an international trade might be planned and controlled by the several national governments, but its guiding principles would be quite different from those of capitalistic nationalism. An instance of a planned attempt to enlarge imports of goods which are believed most desirable in reference to internal planning, by means of selling goods which the internal plan can best spare, is the foreign trade policy of the Soviet Union.

International planning has been proposed to ration and regulate the use of basic commodities and to aid international stabilization of money and credit. Such planning is scarcely likely to succeed in a milieu of competing economic nationalism, but it could be worked out, once the desire to maintain closed national economic systems were eliminated or the equally disruptive aim of selling without buying were abandoned. It is possible, for instance, to conceive of the success of an international wheat

conference—one of the first of the areas in which this type of control has actually been attempted—if the wheat deficit nations were willing to abandon their attempts to import as little wheat as possible even though it must be grown at home at a higher cost, and if the wheat surplus nations were able not only to use all the wheat which was really needed by their own populations but also to allot the production necessary for export to the regions of highest efficiency and lowest cost. And these aims in turn could be achieved more easily if the wheat surplus nations were willing to buy from the wheat deficit nations enough goods or services of other kinds to balance the exchange.

All these considerations, both national and international, give rise to the doubt whether planned stabilization can succeed under the capitalist order. Can any national government achieve the necessary authority over privately owned industry and can it effectively express the purpose of serving the general interest in a higher standard of living so long as the political and social power of private capital exists? Will the separate and competing groups of private industry themselves desire or allow the adjustments necessary in the general interest? Or if other classes gain a sufficient share in political power to induce the government to use the necessary compulsion on a reluctant private industry, will not this very compulsion act in such a way on the habitual dispositions of business men, investors, speculators and financiers as to retard production?

There is of course a theoretical escape from the dilemma—to seek stability not through conscious control and planning but through automatic adjustments of a competitive system. But the evolution of capitalism itself would appear to prevent a practical trial of this theory. In many important parts of the system automatic adjustments are prevented or unduly retarded by the power of capitalistic aggregates themselves. Governmental restrictions are largely the result of the interferences of private industry. In order to remove the barriers to a sufficiently prompt operation of the laws of demand and supply, so that the necessary adjustments might be reduced in amplitude through being increased in frequency, strong central governments would have to interfere to break up monopolies and quasi-monopolies, to augment the number and reduce the power of competitors, to decrease the resistance of creditors against changes in the interest rate and capital deflation, to break up con-

trols in financial and investment markets, to enforce on natural monopolies, patent monopolies and regulated industries an equivalent to competitive pressure, to create free trade internationally. It is just as difficult to imagine a government achieving these ends under modern capitalism as it is to imagine a government enforcing upon private industry a planned stabilization in the general interest.

Some theorists therefore flatly declare that stabilization under capitalism is impossible; that only after the establishment of socialism can true social planning be attempted. Others are merely skeptical and are willing to see the experiment of planned stabilization under capitalism tried, with fear that it cannot succeed but with hope that from the trial something may be learned which will be useful under collectivism. Some theorists reject planned stabilization altogether, in the hope that an equally drastic reorganization of the system in the interest of adjustment through more perfect working of competition can be made. Few if any competent authorities, however, believe that stabilization is possible without essential modification of the economic and political orders.

GEORGE SOULE

See: BUSINESS CYCLES; UNEMPLOYMENT; ORGANIZATION, ECONOMIC; NATIONAL ECONOMIC PLANNING; SELF-SUFFICIENCY, ECONOMIC; ECONOMIC POLICY; RATIONALIZATION; VALORIZATION; PRICE STABILIZATION; CENTRAL BANKING; CREDIT CONTROL; MONETARY STABILIZATION; INFLATION AND DEFLATION; INVESTMENT; PUBLIC DEBT; PUBLIC WORKS; SOCIAL INSURANCE; UNEMPLOYMENT INSURANCE; SOCIALIZATION; GOVERNMENT REGULATION OF INDUSTRY; MONOPOLY; COMPETITION; COMBINATIONS, INDUSTRIAL; FORECASTING, BUSINESS.

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STABILIZATION, MONETARY. See MONETARY STABILIZATION.

STAËL-HOLSTEIN, BARONNE ANNE LOUISE GERMAINE NECKER DE (1766-1817), French libertarian and litterateur. Madame de Staël was the daughter of Necker, finance minister under Louis xvi; in 1786 she married the baron of Staël-Holstein, then attaché at the Swedish embassy at Paris. For a time after 9 Thermidor her salon served as a meeting place for the constitutional party. As a violent opponent of Napoleon, whose regime she looked upon as the negation of the glorious principles of 1789, she became a deeply nostalgic émigrée during the consulate and empire, taking intermittent trips to England, Germany, Poland, Russia and Sweden and spending considerable time at her home at Coppet on Lake Geneva, where A. W. Schlegel, Benjamin Constant and other writers made up an informal cosmopolitan academy. With a feverish energy accentuated by the frustration of her great political talents, which the prevailing attitude toward women prevented from finding active outlet, she produced during the period of her exile a steady succession of works, including besides the famous novels *Delphine* (4 vols., Geneva 1802; tr., 3 vols., London 1803) and *Corinne* (3 vols., Paris 1807; tr., 5 vols., London 1807) important studies on philosophical and historical problems.

A true daughter of the eighteenth century, Madame de Staël was at once a passionate lover of France and a cosmopolitan, and she adhered firmly to the current faith in the indefinite perfectibility of the liberated human spirit. Without countenancing all of its later phases she extolled the revolution as the birth of the free French nation as well as of the rights of all men, although in her posthumously published *Considérations sur les principaux événements de la Révolution française* (3 vols., Paris 1818; tr., 1 vol., London 1818) she also pointed out, in anticipation of de Tocqueville, how deeply the upheaval was rooted in French history. In *De la littérature considérée dans ses rapports avec les institutions sociales* (Paris 1800; tr., 2 vols., London 1803) she tried to show that the advent of democratic government, which she preferred in its Anglo-American form, necessitated a pure language and the development of a new oratorical tradition; French writers in particular

demanding complete equality as envisaged by his social philosophy.

NATHAN REICH

Consult: For an extensive list of works of and on Staszic see *Wiek XIX; sto lat myśli polskiej* (The nineteenth century; a hundred years of Polish thought), 9 vols. (Warsaw 1906-20) vol. i, p. 10-13; Lesniewski, Czesław, *Stanisław Staszic*, Towarzystwa Naukowego Warszawskiego, *Rozprawy historyczne*, vol. v, no. i (Warsaw 1925); Gargas, Zygmunt, *Geschichte der Nationalökonomie im alten Polen* (Berlin 1925) p. 132-38.

STATE. The modern use of the word in the sense of a body politic first appeared in Italy (*stato*) in the early part of the sixteenth century; earlier meanings of *status* and its modern cognates had been estate, an assembly of estates, government or rulers collectively and constitution or form of government. The use of the term as a generic name for a body politic, whether republican or absolute, was probably fixed by Machiavelli (*Prince*, ch. i). Its earliest use in English in this connection occurs in Thomas Starkey's *England* (1538), a book based on Italian authorities. The meaning became common in France and England during the sixteenth century and was adopted into official language in the expression secretary of state, an office held by Robert Cecil under Elizabeth. During the seventeenth century *Staatskunst* became the German equivalent of *ragione di stato* and somewhat later *Staatsrecht* acquired the meaning of *jus publicum*. In English the use of the word was probably extended as the older commonwealth was limited to non-monarchical government; but, as Maitland has pointed out, state never became a technically precise term in English law. As a technical term it belongs to jurisprudence and political theory.

As a generic term the word included from the start a reference to a land, a people and a government. In its present usage it implies some lower limits of size and civilization, as compared with tribe or gens, and also some degree of political independence, although it is widely applied to governments which do not claim sovereignty. Its employment has been carried back beyond its date of origin to cover words such as *polis* or *res publica* and forward to federal and parliamentary governments, which did not exist in the sixteenth century. At the same time it is used rather indiscriminately for non-European political units which never had the historical development more or less common to the states of the European culture area. As a result the word

commonly denotes no class of objects that can be identified exactly, and for the same reason it signifies no list of attributes which bears the sanction of common usage. The word must be defined more or less arbitrarily to meet the exigencies of the system of jurisprudence or political philosophy in which it occurs.

Even now the word state is occasionally employed by semipopular writers as synonymous with society, as when Spengler says "State is history regarded as at the halt"; but scholarly opinion agrees that this is a gratuitous confusion. In general the distinctions drawn have followed two main lines. Theorists with what may be called roughly a sociological background have conceived the state as a grouping or organization of persons acting together for common ends. Its extent would therefore be less than that of society and the definiteness of its ends would distinguish it from communal life in general, which can hardly be said to have any end beyond itself. This distinction is marked by MacIver with the terms association and community; the state is an agency for social control having as its object the regulation of "the outstanding external relationships of men in society." Such a view is now generally associated with some type of utilitarian theory of the state. Writers strongly motivated by considerations of valuation, whether metaphysical, ethical or juristic, are inclined to distinguish state and society as a matter of point of view rather than of grouping. The state would then be an aspect of society rather than a subdivision of it. Thus Hegel ascribed such everyday functions of government as police duties to civil society (*bürgerliche Gesellschaft*) and not to the state. The English Hegelians, who largely gave the word currency in English political theory, thought of the state as an immanent intelligence directing social change rather than as a social agency. The jurists, especially those with a Kantian point of view, have made this type of distinction most explicit. Thus Kelsen rejects altogether a sociological theory of the state; availing himself of a radical distinction of *sein* and *sollen* he identifies the state with the legal order or system of legal norms itself. The distinction would lie therefore in the difference between a causal system of human beings as biological and psychological entities and a system of obligations or norms of conduct.

Although the state included from the beginning the implication of a people as well as of a sovereign, it carried no precise indication of the relation between the two. The modern analogue

of people, the nation, is often used almost interchangeably with state, although the frequent existence of minorities with differing cultural nationality under the same government and the failure of a political unit to include all its nationals have prevented the terms from becoming identical. Where the terms are distinguished, nation refers to a unity of culture: a feeling of loyalty for a common land; common language and literature; identity of history and common heroes; and common religion. Most distinctive of all perhaps is an aspiration to political self-determination. State, on the other hand, refers to a unity of legal and political authority. Although state and nation have not become identical, the belief has grown steadily that national unity is the proper basis for political authority and that the national aspiration for self-determination creates the presumption of its own justice. National states may therefore be called the distinctively modern type, at least on the side of political ideals. It is impossible, however, to generalize about the incidence of nationalism on the actual structure of states. In its earlier history nationalism tended to aid parliamentary liberalism; at present it is more likely to be definitely illiberal.

The fact that the word state usually emphasizes political organization makes it especially difficult to draw a clear line between state and government. In the era of royal absolutism the distinction was not important, since the sovereignty of the state was embodied in the person of the monarch, while the land and the people figured as his patrimony. The distinction is of fundamental importance, however, for a juristic theory of the state. Indeed a series of German theorists from Seydel to Jellinek broke down the patrimonial conception largely by setting up the state as a juristic entity—a legal relation or a corporation—defined precisely by the possession of underived, although possibly non-sovereign authority. The monarch and his government are therefore merely organs of the state. In the most consistent form of juristic theory Kelsen has argued that even the juristic personality of the state is a confusion, the invention of a fictitious entity to embody what is really only a property of law itself. From this point of view a theory of the state would be distinguished sharply both from politics (social ethics or technology) and from sociology, the causal explanation of social fact. For theorists who regard the state as an association, on the other hand, its distinction from government has less importance. Thus to

Laski "the State is, for the purposes of practical administration, the government."

Because of the uncertain meaning of the term it is unprofitable to attempt a classification at large of types of state; and because political institutions follow no generally fixed order of development, it is misleading to speak of the evolution of the state. If, however, the inquiry be limited to the culture area of western Europe and if choice be made in the light of what has been most important for political theory, several types of state which may be said to have characterized various periods may be distinguished.

Of these the first is the city-state of antiquity, within which began political theory, more or less as it has since been understood by Europeans. The special features of this type of state were closely connected with its small size and the consequent intimacy of its political life. This intimacy, on the one hand, resulted in a particularism too restricted for effective government at home and too belligerent to insure peace over the whole range of Greek commercial and social relationships. On the other hand, it produced the conception of free citizenship and free government founded on cooperation rather than force. The Greek theory of citizenship was ethical and educational rather than legal, since to Greek thinkers the state appeared as the arena in which alone a highly civilized life was possible. But the very richness of the ideal tended to restrict it to a small and selected class.

The inclusion of the city-state first in the Macedonian and later in the Roman Empire destroyed its political significance and produced a sense of isolation which for the first time made the individual as such an object of political thought. In the absence of national or class consciousness the correlate of the individual was humanity at large. In the Roman Empire citizenship became world wide, and the bond between citizens was the law rather than the highly cultural achievements of the city-state. The prevailing legal cast which political ties still retain is a heritage of Roman thought. The warrant of the magistrate's authority and of the citizen's rights was law, and law was conceived both as cosmic in its applicability and as embodying justice and right. This ideal of relations within the universal state was perpetuated in the face of the fact that the emperor's authority often flowed from mere military power.

In the Middle Ages political institutions and thought about them were dominated largely by feudal relationships. The combination of po-

litical authority with the control of land tended to destroy any clear distinction between public and private relations. The relation of lord and vassal was more analogous to a contractual one than to that of sovereign and subject. The effective units of power tended to be estates, or classes having like social status and economic interests. A mutual responsibility of rulers and subjects and the right of the latter to assent to legislation and taxation were normal conceptions in such a society, and representation became the usual institution by which these conceptions sought realization.

The modern period of European political history has been characterized most obviously by a closer centralization of political and legal authority, correlated with an increasing range of commercial operations, the loss of local independence and the disappearance of guilds and ecclesiastical corporations. Such centralization was fostered by the need to offset divisions between hostile religious sects and by a growing sense of national unity, which provided a secular basis for political power. To this type of state the conception of sovereignty—the reduction of the political tie to the relation of sovereign and subject and the delegation of authority from a single source—was peculiarly appropriate. In its earlier stages the king was the chief beneficiary of this increase of power, but in England it proved to be compatible with the evolution of Parliament from an assembly of estates into a national legislature, which became the prototype of the sovereign lawmaking body elected by territorial constituencies and by virtually universal suffrage. With innumerable local variations this became the typical form of organization in the national democratic or liberal state.

Down to the present time it cannot be said that this type of state has been superseded, although it seems not improbable that some new type is in process of formation. A unitary state is obviously unsuited to a far flung imperial organization and in consequence the British Commonwealth of Nations, although keeping the form of parliamentary sovereignty, has reduced it to a legal fiction. Either a closer system of international relations will make national independence more fictitious than it is or social and economic relations will have to be curtailed to fit the theory of independence. On the whole, however, developments within modern states seem to provide the strongest forces making for changes of type. There is, on the one hand, the unavoidable necessity of governmental regula-

tion—whether in the interests of owners, workers or consumers—of commercial, financial and industrial relationships and, on the other, the evident inaptness of legislatures as now constituted for dealing effectively with the problems thus presented. The question appears to be whether adequate agencies for such regulation can be created while a general function of coordinating and supervising is left to elective legislatures, or whether a still further centralization of authority is required, involving the disappearance or drastic curtailment of representative government as now understood.

The second alternative, given effect in the fascist governments of Italy and Germany, has produced what is called the totalitarian conception of the state, the doctrine that the state is not only sovereign in a legal sense but has also the function of regulating every department of social life—education, religion and art as well as capital and labor and the whole national economy. Communist government in Russia is not very different in its conception of the state, although it is by profession a dictatorship in the interest of the working class, while fascism seems to be in substance, although not avowedly, a capitalist dictatorship. Both systems involve the abolition of opposition parties and the substantial elimination of parliamentary institutions. Both, however, profess to retain the principle of representation through other agencies, chiefly confederations of producers, although it seems doubtful how far this is an important part of the systems. It is impossible to tell whether these experiments indicate the emergence of a new type of state. In the case of Russia it is possible that communism is dependent on conditions peculiar to that country, the absence of which makes it improbable that other states will develop along similar lines. In the cases of Italy and Germany it is difficult to say whether fascism is a new type or represents a reversion in modern disguise to the old type, dictatorship. What passes for a theory of the fascist state seems in part psychological compensation for social distress and in part an ad hoc mixture of nationalism, Hegelianism and Machiavellianism.

The crux of any general theory of the state has always lain in the relations to be assigned to fact and value. Ultimately there seems to be no way to establish any value except to postulate it and no way to bring value into a series of inferences except to derive it from another value. Yet political phenomena are a tissue of valuations in the light of facts or of facts which consist largely

of valuations. An uncritical combination of the two leads to scandalous examples of wishful thinking, and a radical distinction produces clarity at the cost of formalism. Effective political philosophies have usually been those which have clarified values obscurely postulated in popular thought or which have aided in adjusting valuation to new conditions of fact.

The traditional philosophy of the state addressed itself largely to an ethical justification of the coercion which all states practise either toward their subjects or toward other bodies. Although the older theories of contract and divine right have long been outmoded, the essential distinction between them has persisted. This distinction is to be found in the kind of intrinsic value postulated. If it be assumed to lie in some form of individual life, whether happiness or personality, coercion must justify itself in terms of welfare; if it be assumed to lie in some form of social life, freedom must be defended as contributing to social well being. The difficulty of being faithful to either point of view has led some thinkers to bridge them with a theory of corporate personality and a refusal to distinguish sharply between the liberty of individuals and that of groups. Following Gierke, Maitland together with the political pluralists has made this theory an argument for the limited authority of the state, which would be only a species of the genus corporation. Maitland does not seem to have convinced jurists of the juristic importance of this theory. Gray has argued that, so far as positive law is concerned, it makes no difference whether corporations have a real or a fictitious will and that jurisprudence is equally well served if the state is defined as an artificial entity presumed to give unity to the organ of government. Vinogradoff has urged that on any grounds the comparison of the state to a corporation is analogical.

A juristic theory of the state is a special case of the type of theory conceived in terms of value; it need have no reference to ethical valuation and may be wholly positivist so far as the reality of corporate will is concerned, but legal competence itself is evidently a value, having no necessary relation to actual power. The relation of the state to law assumed in such theories has been various and not very clear. Theories with a political bent, even though they admit a unique relation between the state and law, have commonly admitted functions to the state, such as policy making and administration, which are not strictly iuristic. Theories that have regarded

legislation as the distinctive function of the state have usually viewed law as a norm and the state as a personality, real or fictitious, corporate or otherwise, from which law emanated. In this type of theory it seems to be possible to say indifferently that law presumes a state and that the state presumes law; Vinogradoff asserted that it was idle to derive one from the other. The most advanced position and formally the clearest seems to be Kelsen's, that the origin of law in this sense is a fictitious and meaningless problem.

Even theorists interested chiefly in the validity of public authority have not as a rule distinguished such questions very sharply from factual and causal considerations. From the time of Machiavelli there have been scholars interested chiefly in the mechanics of political and legal relations; the prototype of all such studies is Aristotle's *Politics* (books iv-vi). Treatises of this kind have received enlarged importance from modern investigations into social and political psychology, cultural anthropology and the effects on institutions and ethical valuation itself of physical conditions and economic arrangements. While such studies are perhaps rarely undertaken without some oblique reference to valuation, their weight is on the side of description and causal explanation. Probably their most obvious effect has been to show the enormous variety that obtains in all branches of civilization, political organizations and institutions among the rest, and to indicate the need for caution in the extension of generalizations from one culture area to another. Even within a limited area wide discrepancies have been revealed between the categories commonly used for analytic purposes and those required for historical explanation.

In the political discussion of the recent past an especially important instance of these theories of social change has been the type which attributes them largely or wholly to the struggles of economic classes. This theory is associated with Marxian socialism, although it is not confined to socialists. Indeed the importance of this factor in politics is now generally admitted, although the weight attributed to it varies. From this point of view the state is an agency of the class in power whereby it protects its interests and exploits other classes—in modern times it is capital which exploits labor. It is a corollary of an extreme form of this theory that the state would disappear from a classless society, a bit of utopianism still cherished by some socialists.

A theory of social classes, however, is a highly complicated problem and a two-class explanation is obviously an oversimplification. Moreover the propaganda value of the class struggle is modified or destroyed when complicated with nationalism. The practical implications of the class struggle have given rise to many differences among socialists. The question was canvassed in all its phases in the controversy between orthodox Marxists and revisionists, and since the rise of communism in Russia the dictatorship of the proletariat and other revolutionary aspects of Marxism have had a renewed emphasis. The class struggle has figured equally as an explanation of social change and as the rallying cry of a party. From the standpoint of method the distinctive feature of Marxism is the claim that dialectic affords an intellectual device for uniting these apparently independent purposes. In this association of causal explanation with valuation Marxism retains at least one fundamental identity with the Hegelianism from which it originated.

GEORGE H. SABINE

See: POLITICAL SCIENCE; POLITICS; SOCIETY; GOVERNMENT; SOVEREIGNTY; AUTHORITY; COERCION; OBEDIENCE, POLITICAL; LIBERTY; SOCIAL CONTRACT; CITY-STATE; ABSOLUTISM; FEUDALISM; NATIONALISM; DEMOCRACY; DICTATORSHIP; LIBERALISM; ANARCHISM; SOCIALISM; FASCISM; NATIONAL SOCIALISM, GERMAN; INTERESTS; CLASS STRUGGLE.

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STATE BANKS, UNITED STATES. State banks are banking institutions operating under a charter issued by the state government as distinguished from national banks chartered by the federal government. On June 30, 1932, there were in the United States 6150 national banks and 13,013 state banking institutions. The latter group included commercial banks, trust companies, savings institutions and a small number of private banks. Their total resources were \$34,877,420,000 as contrasted with \$22,367,711,000 for the national banks. Capital, surplus and net undivided profits amounted to \$4,961,603,000 and total deposits to \$27,929,356,000 as compared with \$3,130,929,000 capital, surplus and net undivided profits and \$17,460,913,000 total deposits for the national banks. While state bank deposits were more subject to time restrictions than those of the national banks, their combined demand deposits actually exceeded those of the national banks by almost \$1,000,000,000. Contrary to the general impression the state banks are not merely small institutions. In many cities the most influential banks will be found under state control. Geographically the state institutions show a marked concentration in the southern and middle western states, 8275 of the 13,013 banks being in these sections. The sharp functional differentiation which for a long time existed between state and national banks is passing away. Restrictions imposed upon the latter with respect to real estate loans, savings deposits and fiduciary functions gave the state systems opportunity for

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TECHNICAL EDUCATION. See VOCATIONAL EDUCATION.

TECHNOLOGICAL UNEMPLOYMENT. See UNEMPLOYMENT.

TECHNOLOGY. The character of the modern world, which reached its full development in the nineteenth century, is most intimately bound up with the profound transformation of the technical means of production. In earlier epochs there were great technical advances, as, for example, the improvement in the technique of applying horse power during the Middle Ages. Such inventions, however, appeared merely as isolated changes in production and never resulted in any fundamentally new method of production. The significance of modern technology did not become clearly evident until the expansion of industry on the European continent in the nineteenth century, when the intensification of competition hastened the development of technical progress and promoted its rapid extension. Although a technological conception of history is to be rejected, it must nevertheless be admitted that modern technology was one of the most important conditions which made possible the rise of the industrial system.

The economic nature of modern capitalism is historically bound up with the development of technology. This characteristic quality, which has made the capitalist system so effective, has given rise to an enormous increase in physical

production. It is this quality which distinguishes capitalist production from that of previous epochs and not division of labor, which is age old and which was widespread also during the Middle Ages. Standardized mass production likewise is not a peculiar characteristic of the capitalist era. All static cultures, including the economic systems of the Far East, had standardized mass production on a national scale long before the advent of capitalism. It was modern machinery, however, which made possible the rapid increase in volume of production; and this in turn was the necessary condition for speedy industrialization, for the opening up of pre-capitalistic countries and for the rise of the general standard of living simultaneously with an increase in population. In short, however much the significance of intellectual and spiritual factors for the growth of technical development may be emphasized, it is certain that the dynamics of capitalist economy is bound up intimately with modern technology. As a result of the shift of all heavy work as well as a large share of the finishing work to machines driven by natural power the curve of production was able to rise sharply above the curve of population increase and great individual and social wealth, characteristic of capitalism, was made possible. This vast and sudden increase in wealth was related also to other economic, social and psychological conditions. Of the economic factors only that of the increase in the volume of money, due to increased production of the precious metals, need be mentioned here. Only with an increase in the volume of money could there have been such a tremendous increase in production without at the same time a serious repercussion on the price level.

Capitalism is further characterized by the scientific basis upon which it rests. The production process during the first phase of modern industrial development was still dependent upon skilled labor and upon the training of the worker in handicraft. With the development of technology, however, programs and plans have been shifted to the preparatory stages of production and production itself has been concerned merely with the mechanical realization of the engineer's plans. Thus the work performed in industries, as distinguished from transportation and trade, has become monotonous, often reduced to a few mechanical manipulations.

As production becomes more mechanical, it becomes also more scientific. The precision and tremendous speed of mass machine production.

the utilization and combination of new materials, the fundamental significance of chemical processes—all are based on the systematic and scientific work of the engineer and have taken the place of the older traditional techniques, which developed organically and which were mutually dissociated. In the same way the construction of commercial and production industries is possible only when established upon scientific foundations. Conversely, modern natural science has developed rapidly with the technical aids with which modern industry has provided it.

The cultural implications of the modern production process are far more difficult to grasp. Max Weber and Werner Sombart stressed chiefly the spirit of calculation in capitalist economy. This spirit, they maintained, was reflected back in all aspects of life and created or at least made possible the rationalism of the modern era. Weber, however, also called attention to the rational character of magic and traditional cultures. In these cultures too life is regulated in strictly schematic fashion. It is therefore not true that exact economic calculation began only with the coming of capitalism or with the advent of commercial capitalism. What happened was that the methods of exact economic administration were refined to an extraordinary degree and extended over wider fields. Furthermore the rationalist methodology of the economic system has psychologically transformed the modern man and has pushed into the background the power of irrational forces. But it must not be forgotten that this rationalist spirit became infused into the spontaneous development of science and social organization long before the advent of modern technology. This rationalist tendency represents the dissolution of the mystical element in the consciousness of man, the illumination of all obscurities and enigmas and, as Max Weber put it, the "disenchantment of the world." It was, however, brought about by both science and technology and reflects the decline in the force of religious values.

The relations between technology and social consciousness are very much more complicated. The systematic building up of individual industries and the rational administration of the work are accompanied by sudden and incomprehensible market disturbances. In these disturbances and crises the production process suddenly becomes paralyzed. This change in the general economic situation invests the entire modern production process with an aspect of mystery and, particularly where there are long

depressions, creates the disposition to look at things irrationally. The monotony and the drabness of work perhaps also serve as influences in the same direction. The most modern and most rational technological development thus is accompanied by the appearance of irrational mass movements. There are undoubtedly other causes for these movements, but modern technology does play an important role in that it makes the whole social process more mysterious.

Influenced by technological development, the economic and social structure of the nineteenth century reveals still more acutely the very characteristics which emerged in the industrial revolution: the tendency toward large scale industry, organization and social disciplining of the workers; the decline in skilled labor; the rise of entrepreneurs who organize a strictly rationalized production to fit the market situation; and the creation of a commercial system which develops and expands the market. With the expansion of modern industry there comes also a transformation in social relationships. Whereas the period up to the industrial revolution was dominated by the opposition between the forces of conservatism and the revolutionary bourgeoisie, the following period witnessed the emergence of the conflict between entrepreneurs, capitalists and workers. The question of equitable distribution of the social product is a difficult one because of the antinomy in capitalist production whereby wages not only figure as costs of production but are at the same time also a source of purchasing power. Whereas the lowering of wages up to a certain level is often a necessary condition for the realization of profits, it may likewise involve a danger for profits. These difficulties have been augmented by the growing importance of machinery, for the increased burdens of fixed costs render difficult the determination of this correct distribution and make error so grave.

There are other special characteristics of the capitalist epoch which are even more intimately related to modern technology. The modern period has often been called that of the engineer. Industry and railroads are the most outstanding features of the new world. These were vociferously acclaimed not only because they netted fabulous earnings to the ruling groups but also because they provided undreamed of sensations for the great mass of the bourgeoisie and the workers. An increasing number of production industries, developed out of the traditional handicrafts, were systematically reconstructed

and were drawn into machine production by the growing concentration of capital. In this way a whole army of technical auxiliary forces arose with academically trained men at the top but with the mass of workers engaged only in routine work. And since the industrial system also required a personnel for the sale of the commodities and for public management, there developed also an army of commercial employees and public officials. In this way technological development accelerated the process of bureaucratization, so that a large quota of the gainfully employed were taken from the immediate production processes and shifted to administrative departments.

The increased importance of engineering for production has not been accompanied by a corresponding increase of influence of the engineer in production, society and politics. The engineer's attention is concentrated upon technical progress rather than upon the conditions requisite to economic success, which depends upon the relation of cost to yield. The entrepreneur of the nineteenth century was seldom a technician, but he was always on the watch for inventions which looked promising. He financed the high costs of testing and installing new inventions; he developed a market and thus carried the technical idea into the economic world. Only a few engineers become captains of industry and of these only those who have an insight into the problems of economic organization and finance. Singularly few engineers become great political leaders. The great mass of technical functionaries constitute but a passive element in the whole complex structure. They exert much less influence upon the character of the production process and upon the selection and elaboration of technical ideas than does a foreman in a smaller plant, who exercises a determining influence on technical, organizational and even personal matters. The average technician, even when expertly trained, is more easily replaced than such a foreman.

The great increase in productive powers during the nineteenth century is, then, a result of technological development. Three factors are to be distinguished in this process: the transfer to the machine of complicated motions, the acceleration and intensification of this movement by mechanical power and the introduction of new articles of demand or the satisfaction of old needs through the consumption of new articles. This increase in productive forces has resulted in an enormous per capita increase of the social

product. Even if there be accepted a high estimate of the losses brought about by economic crises, it cannot be denied that nineteenth century Europe and America witnessed an unprecedented rise in the standard of living. During the first half of the nineteenth century in England and to a still later time on the continent the zeal for extension and construction of modern technical equipment was so intense that the strongest pressure upon wages, due to the increased possibilities of capital investment, brought no reaction upon the commodity market. The maintenance of the standard of living on a low level, despite enhanced efficiency of labor, was made possible by the rapid disintegration of the old handicrafts and the simultaneous increase in population (in England the decline of agriculture as well) which flooded the labor market. In the next period, in the continental countries after the 1880's, the working classes and officials came to receive an increased share in the social product. The importance of the consumer was also increased thereby. During the three or four decades before the World War and as a result of the increased industrial production and growing efficiency in transportation the living standards of skilled workers and functionaries began to approximate that of the petty bourgeoisie. This was not yet true of the unskilled and agricultural laborers. With the improved conditions of the European workers came also increased prestige and influence of labor organizations and trade unions, which prevented a rapid drop of the workers' standard of living during the crisis. There was, however, but incomplete security against sudden impoverishment and this only for certain groups of the proletariat. For machine production pushes the older workers out or forces them into less remunerative posts. In times of depression or in highly mechanized industries such degradation may come to workers when they are as young as forty. Nevertheless, despite the insecurity of individual workers, despite the fact that individuals may sink to the lower strata of the proletariat, the cultural development of the workers has made great progress under the influence of a rapid advance in the standard of living.

The new technology has also had a powerful effect upon the political changes which have occurred since the middle of the nineteenth century throughout the world. The countries of the Near and Far East, with the exception of Japan, soon came under the control or influence of European and American powers. Railroads,

telephone and telegraph communications together with modern instruments of warfare gave to the western governments so superior a position that any colonial uprising was hopeless. So great did the power of the western nations become that even the nominally independent states of the Asiatic east were turned into "spheres of interest" as a result of tacit understandings between the great powers. The ascendancy of European influence was furthered also by great capital investments for the construction of railroads, harbors and the like. Since foreign capital investments usually go hand in hand with exports to the debtor countries, their growth was again tied up with the increased technical capacity of western industry. World opinion—similarly under the influence of technical successes—gave impetus to an unlimited belief in progress, which permitted no doubts as to the cultural superiority of the European nations. Even nations of the Far East were inspired by the same ideas, as is borne out by the enormous enthusiasm with which Japan took over European and American methods. Although this naïve enthusiasm of many peoples for technical progress and their belief in its cultural significance subsequently lost intensity, the decisive political changes had already occurred and could not be undone.

The significance of technical progress for social change is complex in character. The most striking social characteristic of the first stage of modern capitalism was the rise and concentration of an industrial proletariat. Social composition was later differentiated by the numerical growth of non-independent middle groups and by the unexpected resistance of the peasants and artisans to their destruction by large scale industry and superior oversea competition. The middle groups made use of the technical advances in both agriculture and handicrafts. Technical progress therefore did not hinder but in a certain sense emphasized the differentiation in social stratification wherever a democratic form of government gave the individual groups an opportunity effectively to serve their own interests. In this connection it is important to note the growing political significance of the class of intellectuals, which increased numerically with extraordinary rapidity. This was a phenomenon accompanying the modern industrial system; and in the severe crises in the post-war period these groups constituted the principal cadres for the formation of fascist parties. The revival of older romantic notions is also of significance in

this connection. In a socialist society these technological facts have a quite different bearing. This is proof that technical development is not unequivocally determined along one line in the social and political field. Thus whereas in western Europe electrification served to improve the economic position of the small producers, in Russia Lenin made it the foundation of socialization even in agriculture. Electrification carried out by a socialist state not only increases the instruments of political power but also makes impossible any production outside the collective economy. This ambivalence of influences, depending on the distribution of political power, is one of the most powerful arguments against a technological interpretation of history.

It is still too early to evaluate the long run significance of modern technology. Sooner or later it may lead to a planned economy with predominantly collectivistic economic measures. These measures can hardly be considered as necessary and inescapable consequences of technological development. Such measures may appear inevitable, however, during economic crises, which increase in intensity and duration as a result of the technological characteristics of modern production and which result in heavy unemployment.

The most recent period since the war has been influenced particularly by the effects of technical progress. Wars have always been accompanied by an advance in technical efficiency. During a war no difficulties confront the financing of new production, even by credit inflation. In modern wars every means of facilitating production improves the position of the warring state and in war time there is an almost boundless demand on the part of the state for agricultural and industrial products of all sorts. The tempo of technical progress therefore is unchecked.

The specific features of technical progress are the extension of the use of machines to new fields, which results in a great saving of human and animal power and the rationalization of already existing machine production. Technical progress has probably never been so universal as during the present era. Only thirty years ago the medium and small scale establishments of European industry were not yet entirely freed from handicraft technique. Today an ever larger share of production is carried out with the most modern methods. The tempo of technical progress is probably more rapid today than it ever was before, in respect to the depreciation of invested capital and in respect to the need for new

investments and the elimination of labor power.

These lines of development are cut across by counter tendencies. Thus capital requirements for new production and expansion of production are often greatly reduced by technical advance in the manufacture of the means of production and they are shifted to meet the needs of organization and marketing.

The causes of the recent acceleration of technical progress are as follows: the systematic promotion of all improvements in production during the war years; the continuation of similar economic conditions during the inflation period, which promoted all kinds of investments; the dissemination of scientific methods, which are now systematically developed in research institutes for almost every industry, and the reciprocal enrichment of individual fields of research.

The substitution of machinery for human and animal power is often considered the chief characteristic of modern technology. This, however, has been the fundamental principle of modern industry for many decades. More important is the fact that this principle is more widely utilized today and that the machine replaces the human hand also in the finishing processes of production. Even today, however, and for a considerable time to come only a small part of the theoretically available power will really be applied to production and transportation.

A decisive and still unsolved problem is that of the effect of technology upon the labor composition of industry and the extent to which modern technology is responsible for permanent unemployment. Both opponents and proponents of the theory of technological unemployment often are satisfied merely to refer to experience. The latter emphasize the fact of mass displacement, and the former point to the absence of permanent unemployment during the period of major inventions and changes in the technique of production during the nineteenth century. Experience, however, does not provide an adequate argument. Displacement could have been compensated by counter tendencies, and not all inventions are of the same nature. As for compensation, it does not come about automatically. In order really to compensate for displacement by the creation of new permanent positions there is need of new capital, new orientation of the workers, initiative on the part of entrepreneurs and discovery of new fields for investment. Older economic theorists took all these conditions for granted on the basis of nineteenth century experience. This is not conclusive, for many

of the inventions of that century, such as the railroads, created new needs which resulted in a general expansion of the productive system. Today the greater portion of technical advance is purely labor saving and thus creates unemployment. In theory as well as in practise the process is quite different in the two cases.

It is the surface facts of rapid technological development and mass displacement which have led to the concept of a new technological era. Completely neglecting the severe disturbances of war, inflation, customs and currency barriers, many writers tend to ascribe the general crisis to technological development. Such theorists fall into an error opposite to that of the orthodox economists. The latter always subscribed to the idea of an automatic establishment of equilibrium and did not take into account the possibility of compensations such as occur in the course of time. They operated with the undisputed facts of displacement. According to the statistics of the United States Department of Labor ("Digest of Material on Technological Changes, Productivity of Labor, and Labor Displacement" in *Monthly Labor Review*, vol. xxv, 1932, p. 1031-57) per capita production in all industrial groups increased 49 percent from 1899 to 1925, with an increase of production of 172 percent and an increase of 87 percent in the number of employed. In individual industries the rise in efficiency was still greater: paper 62 percent, chemicals 114 percent, metals 125 percent, tobacco 191 percent and transportation 1016 percent. On the other hand, other branches of production reported a lesser increase in efficiency: textiles 20 percent and leather 3 percent. The increase in efficiency up to 1925 was perhaps not much greater than in the preceding decades, but it continued in the following years. The absolute increase of production per man, however, was now much greater since it rested upon a broader base. The effects of this increased efficiency coincided with a less rapid growth in population, and therefore the other circumstances which accentuated the crisis prevented speedy compensation for unemployment. Particularly important in this respect was the almost complete stoppage of the international flow of capital, which made more difficult the discovery of new investment opportunities. On the other hand, the fact should not be overlooked that despite monopolies and tariffs the reduction of costs which is brought about through technical advances ultimately leads to price reductions which, under favorable conditions, make possible the reem-

ployment of a large number of the unemployed.

A purely technological viewpoint is misleading in the examination of this process. The fact that present day workers are assisted by a much greater and rapidly increasing amount of mechanical horse power becomes an economic and above all a social problem only when prices and income do not respond to changed market conditions promptly enough to effect an alteration in the structure and scope of production. The change would be sufficient if the utilization of all existing capital could thereby secure the employment of all labor power. Technical advances which result only in saving labor can be incorporated into the system of production without disturbing the labor and capital market only under certain conditions: when the loss of purchasing power and capital values resulting from the depreciation of old investments is made good; when there is assured an additional flow of capital to finance these investments and to absorb the displaced workers, in addition to the financing of investments which are needed to absorb the normal increase in the number of workers; when, during the period in which this flow of additional capital is made available, there is no overstepping of the bounds which are necessary to prevent inflation and with it a severe setback; when fields of investment for such additional capital, whether it be in extending existing production or in creating new types, are opened up; when the volume of production can be expanded by a lowering of prices and eventually of wages; finally, when there is compensation for those disturbances which arise from the fact that enterprises are burdened with debts that were profitable only at the former price level and former market situation. Since during a period of rapid technological progress not all these conditions can exist, severe disturbances are brought about which may thus be traced back to advances in technology.

In popular discussion the disturbances arising from technical progress are considered in relation to the argument concerning purchasing power. It is asserted that the purchasing power necessary to absorb all the goods produced lags behind technological capacities. From another angle this amounts to saying that income and price are not adapted to the new supply. The purchasing power argument is in this sense correct and it is implicit in all theories of business cycles. The decisive problems, however, of re-establishing a new equilibrium cannot be solved simply by the creation of new and additional

purchasing power whenever the market comes to a standstill and unemployment sets in.

Still less plausible are the theories of the technocrats. As a result of the increase in technical equipment and horse power the technocrats advocate a new social organization of production with the introduction of a new standard of value. Naïvely too they urge the creation of a new monetary unit. If this demand really means more than the mere substitution of a new name for the existing system, then it implies the creation of a new system of relative prices based on a technical rather than an economic unit. No particular proof is necessary to show how impossible and essentially absurd this idea is. It would lead to false evaluation of capital and labor and to new disturbances. The tendency, resulting from the great increase in technology, to entrust the direction of production and even economic direction to the engineer would have meaning only if there could be set up a commercial economy based on technical units of production. Even a fully planned economy, however, must calculate in terms of economic units, for its main problem also is the proper application of the available production elements; and the evaluation of these is derived not from their horse power but from their relative scarcity.

The effects of modern technology in the political field are decisive. The World War revealed how rapidly technical progress can move when once it is unleashed and how profound its effects can be. The deadlock of open warfare, the maintenance of armies of millions of men in trenches and the fact that attack could be made only after months of preparation—all these were results as well as causes of the modern technique of warfare. The increasing use of airplanes and the motorization of armies, which characterized the World War, created new tactical and strategic possibilities and needs. Modern warfare with its demands upon both the armies at the front and the population at home, with the necessary organization by the state of all industrial and agricultural production and the rationing of every necessity of life, brought about such a comprehensive organization and such an enormous concentration of power in the state that the way was thus prepared for the dictatorship of the totalitarian state. The totalitarian state too has grown up on the foundations of modern technology, which created the means for mass propaganda of all sorts. In addition there are the modern technical means of mass domination through violence, as in street fighting. It is not

to be assumed, however, that modern technology has completely broken down the movement for the emancipation of the individual. The modern system of production can permanently pursue its inherent dynamic impulses only if there is freedom in the intellectual sphere.

The philosophies of modern technology are mutually contradictory. The influence of technology, like that of every social institution, is open to more than one interpretation. It was first generally assumed that modern technology on the whole made human labor more monotonous when handwork was transferred to the machine. It is true that many of the modern labor functions are spiritually deadening, but it must not be forgotten that many tasks in agriculture and handicraft are likewise monotonous. On the other hand, modern industry has created a great number of functions which require unlimited concentration and skill. In view of the enormous increase in trade and communications and the need for quick changes in methods of production it is not at all certain that the number of really monotonous tasks is particularly large or relatively larger than before, although the kind of monotony is today more exacting and more destructive to the nervous system. It is a distortion of historical reality, however, to consider slave and serf labor as more inspiring than modern factory labor. The absurdity of such romantic idealization is revealed in the contrast between the intellectual level of the dull peasant groups of earlier centuries and that of the enlightened urban and industrial working class of today.

The skeptical attitude toward contemporary culture is unjustly linked up with modern technology. Technology has in fact given rise to measures counter to alienation from nature and monotony of urban life. The absurdity of the typical apprehension of intellectuals that security is becoming too great has been revealed by the course of historical events. The cultural dangers of our era are indeed, like everything else, conditioned by technology but only indirectly. They are connected with the problem of the masses, their concentration in cities and their incorporation into cultural institutions which had previously served only small groups of the élite. The older classical educational ideals were shattered by the broadening of the base of the educated classes and the greater turn to practical tasks. At the same time the possibility of intellectual relations with the masses provided a basis for demagoguery, which developed within democracies and which during economic crises was

able to destroy democracy. The emancipation of the lower classes thus leads to a crisis which threatens to destroy all the values of the bourgeois world and the entire sphere of intellectual freedom. Modern technology is concerned in this process only in so far as it supplies the means for mass domination; it could, on the other hand, be made to serve quite different social systems and ideas.

Decadence, another characteristic feature of the contemporary cultural situation, is influenced but not wholly determined by technological development. Only in so far as decadence comes about primarily in periods of great but unequally distributed wealth and in so far as increased productivity is dependent on technological development is decadence conditioned by technology. The looseness of this dependence is illustrated by the peoples of the Far East, who have thus far withstood the psychic influences of modern technology. The Japanese in particular have managed to absorb modern technique without losing their attachment to their own traditions, history and family cohesion. The cultural crisis of Japan which threatens the whole foundation of Japanese life has been brought about not by the labor process but by the social problems of capitalism.

Marx reduced all crises in European history to an ever recurring contradiction, founded in the dialectic of history, between the increasing productive forces and their relationship to social exploitation. This thesis is undeniably applicable to the present situation, and the prevalence of the purchasing power argument is an economic expression of this fact. Upon the solution of the inner contradictions, that is, the elimination of the hindrances to the utilization of technological potentialities, ultimately depends the possibility that society may do away with the permanent dangers of crises and provide for cultural productivity together with an undisturbed dynamic course of production. For technology in itself is indifferent. The real cultural problem involved in such an industrialized society would not be caused by psychical dangers inherent in the character of work under modern technology but would rather be bound up with the problem of the masses. Much of the danger involved, however, could be overcome by the utilization of technological possibilities.

EMIL LEDERER

See: MACHINES AND TOOLS; ENGINEERING; SCIENCE; INVENTION; PATENTS; STANDARDIZATION; SPECIALIZATION; INDUSTRIALISM; LARGE SCALE PRODUCTION;

Carlyle, never a very scrupulous fighter and in his presentation of utilitarian judgments of value generally quite unfair. But Carlyle possessed the mystic graces and possibly that insight into ordinary men which the utilitarians most certainly lacked. By the turn of the twentieth century the utilitarians had ceased to be prophets. Even liberalism, through the medium of T. H. Green, was drawing inspiration from German idealism. Secondly, by attraction important elements in utilitarian ideology passed over into Marxism and were turned against *laissez faire*. The indebtedness of Marx to the classical economists for his labor theory of value and to the Ricardian socialists for his theory of surplus value—not to mention other technical borrowings—is of course well known. But the significant relation between utilitarianism and Marxism, at least in its vulgar form, is a spiritual one: both make economic relations the basic fact of social organization, both are class conscious, both are piously materialistic and both very profitably confuse their desires with a supernatural force which they are unwilling to call God.

CRANE BRINTON

See: INDIVIDUALISM; HEDONISM; ALTRUISM AND EGOTISM; EPICUREANISM; RATIONALISM; HUMANITARIANISM; POSITIVISM; ECONOMICS, section on THE CLASSICAL SCHOOL; LAISSEZ FAIRE; CRIMINOLOGY.

Consult: Halévy, Élie, *La formation du radicalisme philosophique*, 3 vols. (Paris 1901-04), tr. by M. Morris as *The Growth of Philosophic Radicalism*, 1 vol. (London 1928), with critical bibliography; Stephen, Leslie, *The English Utilitarians*, 3 vols. (London 1900); Albee, Ernest, *A History of English Utilitarianism* (London 1902); Davidson, W. L., *Political Thought in England; the Utilitarians, from Bentham to J. S. Mill* (London 1915); Brinton, Crane, *English Political Thought in the Nineteenth Century* (London 1933) p. 14-30, 89-103; Kent, C. B. R., *The English Radicals* (London 1899) p. 168-249, 322-414; Wallas, Graham, *The Life of Francis Place* (rev. ed. London 1918); Dicey, A. V., *Lectures on the Relation between Law and Public Opinion in England during the Nineteenth Century* (2nd ed. London 1914) lectures vi, ix; Pollock, Frederick, *An Introduction to the History of the Science of Politics* (new ed. London 1923) p. 101-11, 118-33; Veblen, Thorstein, "The Preconceptions of Economic Science," and "The Socialist Economics of Karl Marx and His Followers" in his *The Place of Science in Modern Civilisation and Other Essays* (New York 1919) p. 130-44, 409-56; Schumpeter, J. A., "Epochen der Dogmen- und Methodengeschichte" in *Grundriss der Sozialökonomik*, vol. i, pt. i (2nd ed. Tübingen 1924) sect. iii; Cahnmann, Werner, *Der ökonomische Pessimismus und das ricardosche System* (Halberstadt 1929) ch. B; Guyau, M. J., *La morale anglaise contemporaine* (4th ed. Paris 1900); Cazamian, L. F., *Le roman social en Angleterre (1830-1850)* (2nd ed. Paris 1904) ch. ii; Neff, E. E., *Carlyle and Mill* (2nd ed. New York 1926).

UTILITY. See VALUE AND PRICE; ECONOMICS, section on MARGINAL UTILITY.

UTOPIA. The word *utopia*, a coinage from the Greek, meaning literally "nowhere," was first used by Sir Thomas More in 1516 as the name of a far distant island on which, according to his fiction, there existed an ideal commonwealth. Since the publication of More's *Utopia* its title has been appropriated to designate more or less indiscriminately literary works of all ages which seek, whether through the medium of the dialogue, the novel or some similar form, to conjure up a society or state free from human imperfections. In recent years, however, the term has come also to be used in a more strictly sociological sense. The analysis of a particular type of intellectual outlook and thought pattern which is now designated as the utopian mind or the utopian spirit has become one of the most fruitful fields of inquiry for contemporary sociologists. It is coming to be realized that a clear understanding of the structure and characteristics of this psychological type is important not only in itself but also because it throws light on the social process as a whole no less than on intellectual development in its broader aspects.

As a literary genre the utopian fiction made its appearance many centuries before More. It was Plato who furnished, notably in his *Republic*, the general model to which all later utopian fictions have been heavily indebted. But whereas the writings of Plato were motivated primarily by an authoritarian desire to buttress, in as rational terms as possible, a static and hierarchically ordered social and political system, the utopian writings of More and his fellow humanists during the Renaissance were the expression of a wave of intellectual and social release. Steeped in the spirit of the classical revival and at the same time living in detachment from the broader currents of life about them, these small groups of humanists could arrive at an objective attitude toward current social norms and institutions. It is in fact the humanist way of life which accounts for both the rigidly systematic quality of the characteristic Renaissance *utopia* and the often paradoxical and fantastic nature of many of its conclusions. In More, for example, a trenchant criticism of social injustice as manifested in the period of transition between feudalism and capitalism is combined with a nostalgic mediaevalism; in Bacon's *New Atlantis* (1627) an aggressive faith in the liberating role of science with a predilection for authoritarianism; in Cam-

panella's *Civitas soli* (1623) the pious superstition of an orthodox Calabrian monk with an antipathy to tyranny and an untrammelled intellectual search for means to eradicate social evil. The most realistic of the humanist utopias was Harrington's *The Common-Wealth of Oceana* (1656), which was later to exert a marked influence on the constitution makers in the United States. Drawing upon his travels and his humanistic studies, Harrington undertook during Cromwell's regime a comparative study of constitutions to discover the form of government most ideally suited to his troubled country.

The third great climate of opinion in which utopian fictions played a significant role was that which prevailed during the eighteenth and the early nineteenth century. The widespread social unrest engendered by the economic and political readjustments which culminated in the bourgeois revolutions found natural expression in the succession of heterogeneous utopias modeled on the work of the earlier humanists. In the period following the French Revolution the literary utopias were by comparison oriented more consistently toward a single political ideal. Thus Engels in his *Die Entwicklung des Sozialismus von der Utopie zur Wissenschaft* could more or less plausibly group together Morely, Babeuf, Saint-Simon, Fourier, Cabet and Owen and, despite their minor variations of approach, dub them indiscriminately "utopian socialists." In branding these antibourgeois reformers with the epithet utopian Engels meant to rebuke them for their addiction to the sentimental delusions of the eighteenth century *philosophes*, who naïvely fancied that they could bring their fellow men to carry through a reorganization of society merely by placing before them certain abstract ideals. Since, according to Engels, the starting point of scientific socialism is the realization of the definite objectives which can be carried through at a given stage of history and in a given social complex, he called upon social reformers to abandon the a priori fabrication of ideal societies and to devote their energies instead to precise analyses of current social forces. Having done this they would naturally proceed to identify themselves with the proletariat, that class which alone can carry through such a reorganization of society.

While the making of utopias by no means came to an end with the utopian socialists, the subsequent examples, although frequently meeting with considerable literary success, cannot be said to have attained, as did their predecessors,

a broader social significance. And yet until the development of sociology they continued to provide a substitute of sorts for the scientific analysis of social phenomena.

In the sociological approach to the problem of the utopian mind and the utopian spirit the attempt is made to ascertain the psychological genesis of this type of mental outlook, the principal phases of its historical development and its functional significance. The term utopian, as here used, may be applied to any process of thought which receives its impetus not from the direct force of social reality but from concepts, such as symbols, fantasies, dreams, ideas and the like, which in the most comprehensive sense of that term are non-existent. Viewed from the standpoint of sociology, such mental constructs may in general assume two forms: they are "ideological" if they serve the purpose of glossing over or stabilizing the existing social reality; "utopian" if they inspire collective activity which aims to change such reality to conform with their goals, which transcend reality. There is thus a close bond which connects the social process itself with intellectual development and the formation of the mind. Not only the mental structure of existing social groups but the destiny of an entire social scheme may depend upon the nature of the unreal or reality transcending concepts originally embraced by these groups, upon the manner in which the original ideas have been assimilated into the social stream and, finally, upon the ultimate outcome of the interaction between the utopian element and the other elements and the mind.

From the psychological point of view the history of the utopian mind involves an evolutionary process which begins with the primitive mythical mind and leads gradually to the comprehension of reality. Fragmentary traces of this development may be discerned in the growth of the child as well as in the evolution of mankind. Sometimes accelerated by the concrete social situation and sometimes interrupted by forces of retrogression, the process of development leads, however unevenly, not only to a definite realism but to a progressive rationalism. It is characteristic of the primitive or mythical mind that it offers escape from reality in the form of symbolic equivalents which bring to satisfaction impulses and desires frustrated by social realities. Such a tendency of mind operates directly to fuse the unreal subjective and symbolic wish fulfilment fictions with elements of objective reality and in fact cannot distinguish

between the two. This phenomenon, characteristic of children and the dream experiences of normal human beings, is found moreover not only in certain types of neurotic individuals and primitive peoples but also occasionally among certain strata of contemporary society which have not progressed far beyond the primitive and under stress of circumstance give way readily to atavistic urges.

The function of the myth as contrasted with the daydream, which at most can represent an interplay between two individuals, is to project and collectivize those subjective ecstasies and symbolic equivalents for the wish fulfilment idea which survive in a particular society. But even in the primitive variety of myth it may be observed that with the differentiation of social groups the oppressed classes make different use of their religious ecstasy and their symbolic equivalents from that made by the ruling classes and in particular that they fuse them with social resentment. Hence the religious aspects of the myth already tend to give way to the social. Whereas the ruling group, as it progresses toward rationalistic attitudes, gradually converts the symbolic equivalents originally common to the entire collectivity into instruments which can be consciously manipulated to support its authority, and so transforms them into a protective coloring of ideology, the masses oftentimes evolve from the same matrix a utopia which subverts the status quo. Whenever the myth stereotypes, under the guise of ideology, fail to maintain the stability of the social order against the disintegrating force of economic, political or other change, the ingredients of the myth tend to be metamorphosed into eschatological and chiliastic conceptions. The strata which are most victimized by social tabus and oppression are in such cases moved as much by the impulses springing from symbols as by social objectives which can be immediately realized. At this moment the reality transcending element, hitherto merely a wish fulfilment equivalent, becomes the force which welds the masses into a collectivity and spurs them to group action; and in turn the action, by bringing them into contact with actual concrete situations and by necessitating collective adaptation, gradually becomes the instrument through which reality is disclosed to an ever greater degree. Thus with the aid of utopian fictions the rationalization of consciousness follows a course altogether different from that of the rationalization of society by the ruling groups.

One of the principal phases in the progressive rationalization of the western mind through the medium of the utopia is represented by the teachings of the Jewish prophets. Their enunciation of the doctrine that collective evil is not to be exorcized through ritualistic magic and that any change in social destiny must be wrought on the basis of individual responsibility marked the completion of the process whereby the mere expression of religious ecstasy became an ethical criticism of society. The ethical rationalization of particular behavior patterns and the transformation of the will to change society into a deep inward force were furthered also by the work of Jesus. Through Him ethical salvation, an idea which the later prophets had extended to the Gentiles, was to be sought by all mankind. In His case as in that of the prophets it is significant that the individualization and ethical rationalization of religion were the work of isolated individuals rather than of the official priestly caste. Among the postexile prophets the enforced absence from the traditional paraphernalia of ritual service was a factor which served to place emphasis on the significance of religion as an inner experience of the individual. In the early years of the modern era the eschatological-chiliastic utopia again made its appearance, as may be seen most clearly in the efforts of Thomas Münzer to fuse religious ecstasy with social pressure. The first phase of the subsequent uprisings fomented by the masses also bore a resemblance to the Peasants' War in that it aimed at the immediate realization of the millennium; while the later forms of the utopian mind as typified in the "liberal utopia" of the emergent bourgeoisie, where the emphasis was shifted to the "idea," can be accounted for only as a reflection of the gradual sublimation of social struggle and religious expectation. Thus in various ways it may be shown that the utopian fiction constitutes an integral part of the spiritual and intellectual equipment of the different social groups, and by orienting their activity in terms of this reality transcending element these groups, each in its own way, discover social reality. Therefore the utopian element may be said to operate not only as a collectivizing force in political activity but also as an underlying thread which knits together the conception of reality as held by the different classes of a collectivity. It is this utopia, this ultimate point of reference, which determines what questions shall be posed as to social events. In it are rooted not only the basic concepts which man creates in order to

comprehend social phenomena but also the diverse forms of the "historical stage of existence" of various groups.

KARL MANNHEIM

See: COMMUNISTIC SETTLEMENTS; FOURIER AND FOURIERISM; OWEN AND OWENISM; SAINT-SIMON AND SAINT-SIMONIANISM; COMMUNISM; SOCIALISM; ANARCHISM; PRIMITIVISM.

Consult: Dermenghem, E., *Thomas Morus et les utopistes de la Renaissance* (Paris 1927); Hertzler, J. O., *The History of Utopian Thought* (New York 1923); Gerlich, Fritz, *Der Kommunismus als Lehre vom tausendjährigen Reich* (Munich 1920); Lichtenberger, A., *Le socialisme utopique* (Paris 1898); Prys, J., *Der Staatsroman des 16. und 17. Jahrhunderts und sein Erziehungsideal* (Würzburg 1913); Girsberger, Hans, *Der utopische Sozialismus des 18. Jahrhunderts in Frankreich und seine philosophischen und materiellen Grundlagen*, Zürcher volkswirtschaftliche Forschungen, no. 1 (Zurich 1924); Schomann, E., *Französische Utopisten des 18. Jahrhunderts und ihr Frauenideal* (Berlin 1911); Voigt, A., *Die sozialen Utopien* (Leipzig 1906); Engels, Friedrich, *Die Entwicklung des Sozialismus von der Utopie zur Wissenschaft* (4th ed. Berlin 1891), tr. by E. Aveling (London 1892); Mannheim, K., *Ideologie und Utopie* (Bonn 1929); Vida Najera, Fernando, *Estudios sobre el concepto y la organización del estado en las "Utopías"* (Madrid 1928); Reiner, J., *Berühmte Utopisten und ihr Staatsideal* (Jena 1906); Doren, Alfred, "Wunschräume und Wunschzeiten" in *Bibliothek Warburg*, Hamburg, *Vorträge 1924-1925* (Leipzig 1927) p. 158-205; Massó, Gildo, *Education in Utopias*, Columbia University, Teachers College, Contributions to Education, no. 257 (New York 1927).

UVAROV, COUNT SERGEY SEMENOVICH (1786-1855), Russian official. Uvarov, a member of the landed aristocracy, studied at the University of Göttingen, where he came in contact with the Humboldts, Goethe and Madame de Staël. At the age of fifteen he was an attaché in the Ministry of Foreign Affairs and in 1809 became secretary to the Russian Legation in Paris. From 1811 to 1822 he served as curator of the school district of St. Petersburg and from 1833 to 1849 as minister of education. He attained a reputation as a scholar and wrote many historical, literary and philosophical works.

Uvarov started out as a pronounced liberal, but after the Decembrist revolt of 1825 he adopted the autocratic views of Nicholas I and enforced strict government regulation of public education, science, literature and the press. He based his educational philosophy on the three fundamental tenets of Russian absolutism: orthodoxy, autocracy and nationalism; as minister of education he shaped the educational institutions in strict conformity with these principles. Primary education was almost completely

neglected. The curricula of the secondary schools were purged of such "superfluous" subjects as philosophy and natural sciences, while the teaching of the orthodox religion was made more intensive. Uvarov initiated the teaching of the classics in the secondary schools; toward the end of his administration the authorities restricted this branch of instruction, believing that the political experiences of the Greeks were conducive to the development of liberalism and republicanism. The institutions of higher learning were reserved to the ruling classes and were looked upon as training schools for government officials. Although Uvarov applied his principles in a ruthless manner, he failed to stem the tide of liberalism, which reached ever widening circles of Russian intellectuals. Moreover by sending the most gifted students abroad to study and then nominating them to university posts Uvarov himself was instrumental in spreading those very ideas against which his efforts were ostensibly directed. When in 1849 the Russian government became still more reactionary, he was forced to resign; he was thus victim of the movement which he had initiated.

N. ROUBAKINE

Consult: Pogodin, M., "Dlya biografii grafa Uvarova" (For a biography of Count Uvarov) in *Russky arkhiv*, vol. ix (1871) 2078-2112; Miliukov, P. N., *Ocherki po istorii russkoy kultury* (Outlines of the history of Russian culture), 3 vols. (new ed. Paris 1930-31) vol. ii, pt. ii, p. 782-96; Schmid, Georg, "Zur russischen Gelehrten-geschichte" in *Russische Revue*, vol. xxvi (1886) 77-108; Koyré, Alexandre, *La philosophie et le problème national en Russie au début de XIX^e siècle*, Institut Français de Leningrad, Bibliothèque, vol. x (Paris 1929) ch. vii; Darlington, T., *Education in Russia*, Great Britain, Board of Education, Special Reports on Educational Subjects, vol. xxiii (1909), especially p. 76-79; Hans, Nicholas, *History of Russian Educational Policy* (London 1931) ch. iii.

UZTÁRIZ, JERÓNIMO DE (1670-1732), Spanish economist. Uztáriz was a member of the Real Junta de Comercio y de Moneda and of the Consejo de Indias. His *Theórica y práctica de comercio y de marina* (Madrid 1724, rev. ed. 1742; tr. by J. Kippax, 2 vols., London 1751) did exert a profound influence upon Spanish economic thought and state policy for half a century, but the praise bestowed upon it by commentators and translators has been extravagant. Repeatedly identifying wealth and treasure, Uztáriz held that economic recovery was attainable through industrial and commercial policies designed either to attract specie to Spain or to prevent its exodus. While he was familiar

Dialogo sul disordine delle monete nello stato di Milano (Milan 1762); *Bilanci del commercio dello stato di Milano* (Milan 1764; new ed. by L. Einaudi, Turin 1932); *Memorie storiche sull' economia pubblica dello stato di Milano* (Milan 1768); *Riflessioni sulle leggi vincolanti, principalmente nel commercio de' grani* (Milan 1769). Verri's chief works have been reprinted in *Scrittori classici italiani di economia politica. Parte moderna*, vols. xv-xvii (Milan 1804).

Consult: Bouvy, Eugène, *Le conte Pietro Verri, ses idées et son temps* (Paris 1889); Manfra, M. R., *Pietro Verri e i problemi economici del tempo suo*, Biblioteca Storica del Risorgimento Italiano, n.s., no. 1 (Milan 1932); Valeri, Nino, "Un rivoluzionario del settecento: Pietro Verri" in *Nuova antologia*, vol. ccclxxiii (1934) 3-28, 170-201, 348-74, 537-68, and vol. ccclxxiv (1934) 48-79, 206-32; Einaudi, Luigi, "Introduzione" in his edition of Verri's *Bilanci del commercio dello stato di Milano*, Piccola collezione di scritti inediti o rari di economisti, vol. i (Turin 1932) p. 11-36; Ferrara, Francesco, *Esame storico-critico di economisti e dottrine economiche del secolo XVIII e prima metà del XIX*, 2 vols. (Turin 1889-91) vol. i, pt. i, p. 300-05, 357-61, 371-75; Ricca Salerno, G., *Storia delle dottrine finanziarie in Italia* (Palermo 1896) p. 276-82; Macchioro, Gino, *Teorie e riforme economiche, finanziarie ed amministrative nella Lombardia del secolo XVIII* (Città di Castello 1904); Negri, Luigi, "Saggio bibliografico su Pietro Verri" in *Archivio storico lombardo*, 6th ser., vol. liii (1926) 136-51, 337-51, 499-521; Verri, Pietro and Alessandro, *Carteggio dal 1766 al 1797*, ed. by A. Giulini, E. Greppi, and F. Novati, vols. i-vi (Milan 1910-).

VESTED INTERESTS. When an activity has been pursued so long that the individuals concerned in it have a prescriptive claim to its exercise and its profits, they are considered to have a vested interest in it. When this interest is given legal sanction it becomes a vested right. The prescriptive claim may be enforced against other individuals or even against the state itself seeking to encroach upon it. In this broadest sense vested interests and vested rights are as old as human history and as broad as social life. Property may be traced back ultimately to the vesting of ownership or other proprietary rights in individuals and groups who have carved out their claim by conquest or effort or ingenuity and have made it secure by force or continued exercise of it. Roman law, however tenacious of the sanctity of property rights, recognized *usucapio*, the taking by continued use, in order that there might be no sustained uncertainty about ownership. The whole of legal history may be regarded as the sequence of vesting rights in individuals whose claims for one reason or another come to be regarded as sufficient.

The rise and fortunes of capitalism in the western world have given the concept the most specific consequence for social thought. Feudal-

ism was a system of frozen rights and relationships; and while it sanctioned the established, it did not, except through a certain residual continuity with Roman law, smile upon more newly acquired rights. With its disintegration scope was given to the exercise of arbitrary power over private property by the prince and the creation of a system of aristocratic privilege. The whole effort of a rising capitalism in the sixteenth and seventeenth centuries, as exercised through the natural law jurists of that period, was to place bounds around the dynastic power and privilege and to open a path for the vesting of the claims which a new merchant class was pressing. On the continent this struggle found intellectual expression in the writings of Grotius, Pufendorf and other natural rights philosophers. In England it conditioned the constitutional conflict of the seventeenth century, with its insistence upon subjecting an arbitrary monarch to the rule of law. The culmination of both movements of thought was the eighteenth century natural rights philosophy of the French and English intellectuals, finding its most significant formulation in Locke's definition of property as whatever a man has mixed his labor with. This flung the gates open for a legitimation of the claims of the capitalist class as rapidly as they were acquired; and once the rights were vested, it placed barriers against the encroachment of the state upon them. The vested interests of a rising capitalist class were written into the English common law as they were written into natural rights philosophy, and by the latter part of the eighteenth century Lord Mansfield declared it an established doctrine that vested rights must be protected. As capitalism matured in nineteenth century England, the task of removing the disabilities which political inequality imposed upon the vesting of new interests was completed by the reform movements and Benthamite jurisprudence in the period between 1832 and 1870.

The *locus classicus* of the vested interests, however, is American business enterprise and its accompanying body of constitutional law. In fact the history of American constitutional law is most clearly intelligible as a record of the varying legal sanctity of the vested interests. The Constitutional Convention itself may be seen as a concerted attempt to intrench the vested interests against agrarian discontent and the lingering revolutionary *élan*. In the judicial interpretation of the constitution a series of bulwarks was erected against the interference of state legislatures with this property conscious

intent of the framers. The mechanism was the establishment of judicial supremacy and the power of judicial review of legislative enactments. The doctrine principally relied upon before the Civil War was that of vested rights. While this doctrine sought to secure the constitutional guaranty of equal protection of the laws and the constitutional prohibition of the impairment of the obligation of contracts, it had no substantial underpinning within the constitution for negating hostile state legislation and had to seek it outside the constitution in the theory of implied limitations on state power. These limitations were found to be implied in natural law, in the social compact, in the character of republican government and in the genius of American institutions. Ultimately of course they were nowhere more clearly implied than in the genius of an expanding American capitalism.

The first important statement of the doctrine of implied limitations as the basis for vested rights is given by Justice Chase as an *obiter dictum* in *Calder v. Bull* [3 U.S. 386 (1798)]. Chief Justice Marshall in his first great decision, *Marbury v. Madison* [5 U.S. 137 (1803)], showed the trend of his thought in this direction by saying: "The government of the United States has been emphatically termed a government of laws, and not of men. It will certainly cease to deserve this high appellation, if the laws furnish no remedy for the violation of a vested legal right." His statement of the doctrine reached its most significant form in *Fletcher v. Peck* [10 U.S. 87 (1810)], when he refused to inquire into the reputedly corrupt circumstances surrounding the Yazoo land grants on the ground that they had created a vested right, and *Dartmouth College v. Woodward* [17 U.S. 518 (1819)], when he declared rights vested by a state charter of incorporation irrevocable. Marshall's tenacity of purpose and the clarity with which he saw the stakes of the conflict were given substance and circumstance by the erudition of his friend Justice Story and of Chancellor Kent. The latter set down in his opinions in the New York court and in his *Commentaries* (4 vols., New York 1826-30), delivered as the lectures of a law professor, the fullest and most reasoned exposition of the doctrine of vested rights before *Cooley*. From the end of Marshall's dominance over the Supreme Court until after the Civil War the vested rights philosophy was thrust into the background by the Jacksonian supremacy, the slavery conflict and the needs of federal expansion. It continued, however, almost

uninterruptedly in state judicial review in another form—that of the due process clause, which, while unavailable in the federal constitution against state legislation, was available in the state constitutions. The New York court, which invalidated a whole series of statutes between 1840 and 1860, set the pattern for other states.

After the Civil War the swift expansion of business energies and business power brought again the threat of control by hostile state legislatures. To meet this threat the due process clause of the Fourteenth Amendment was conscripted into service by the Supreme Court for the protection of vested rights, and it was used with greatest effect in those cases where the denial of due process was alleged to constitute a deprivation of liberty of contract. Actually the concept of vested rights, along with that of due process, is vague and malleable. Vested rights have had a varying sanctity in the functioning of the judicial process. In a significant sense the history of American constitutional law is the record of advances and retreats on the battle ground of vested rights, the contending forces being those groups who have sought to extend the area of state control and those who have sought to limit it. At bottom these conflicts have been between economic interest groups. But the reality of the battle has been considerably obscured by the rhetoric of democracy thrown over it—in Marshall's day nationalism and after the Civil War individual liberty.

Heartened by its triumph American business enterprise in the 1880's and after turned from the defensive and sought a free field for industrial mergers and the concentration of power. What had previously been mainly a desire to protect existing vested rights against state encroachment became, in a period of monopoly capitalism, an effort to wrest and hold power for new vested interests. This alternation of periods of defense and aggression, of the protection of existing vested rights and the creation of new vested interests, is integral to the history of capitalism. In America the new vested interests not only broke the competitive pattern of the older economic society but threatened the established political forms. Accordingly two successive generations—in the late 1880's and at the turn of the century—threw themselves into the task of curbing the vested interests. The culmination of the efforts of the first generation was the Interstate Commerce Act and the Sherman Anti-Trust Act; of the second, Roosevelt's

trust busting, Wilson's New Freedom and the Pujo investigation into the money trust. The legislative efforts were largely frustrated by Supreme Court policy, especially as formulated in the rule of reason with respect to monopolies; and the official attacks and investigations served only to put the vested interests on the defensive again until after the World War.

The attack on the vested interests was a phase of the muckraking era. Denunciations of the "interests" were common in the 1880's and 1890's, especially in the western agrarian movements, the fiction of Frank Norris and the writings of Henry Demarest Lloyd. But with the turn of the century they became epidemic in the influential magazines and produced a unique periodical literature. Ida M. Tarbell's "History of the Standard Oil Company" (*McClure's Magazine*, 1902-04) and Thomas W. Lawson's "Frenzied Finance" (*Everybody's Magazine*, 1904) were the opening guns of the campaign. C. E. Russell, Upton Sinclair, David Graham Phillips, Alfred Henry Lewis, Burton J. Hendrick, Ray Stannard Baker and Lincoln Steffens all had a hand in exposing the power of the vested interests and the malignancy of the "system." Their attacks became the foundation of magazine fortunes and writing reputations. The tone of the articles was often as frenzied as the financial operations they described; there was generally more heat than analysis in them; and several of the writers later joined or returned to the fold that they had depicted as wolves in disguise. The entire movement was probably as episodic in the span of American life as it turned out to be in the lives of the principals. Yet it left some impress on politics, and it subsequently furnished the basis for more detached analysis of the new phases of business enterprise.

The high point of such an analysis was achieved in the writings of Thorstein Veblen. He took the term vested interests out of the popular literature of the muckraking period and gave it a laborious and yet ironic precision. His definition of a vested interest as "a marketable right to get something for nothing" (*The Vested Interests*, p. 100) has, however, a greater sharpness in itself than is contained in his actual analysis. The latter suffers from being at once too broad and too narrow, the reference being now to the whole of business enterprise and now to the strategic position of being able to make use of the technique of "sabotaging," or "conscientious withdrawal of efficiency," in the pursuit of maximum profit. With Veblen as with the more

popular writers of the muckraking era the term vested interests must be regarded not as a sharply analyzed concept but as a symbol with a shifting reference.

Yet Veblen's analysis has taken on an increased meaning in the period of corporate growth and banker control in the 1920's and in the wrack and reconstruction of the depression period in the 1930's. While the doctrine of vested rights arose originally to protect a socially valid claim against the encroachment of other individuals and was as such sanctioned by the state, it has become increasingly a matter of vesting the right against the state itself. In an era of corporate concentration vested rights have paralyzed the effective functioning of state control and overshadowed the very existence of the state. A communist state finds no place for them. A fascist state, however, after rooting out certain dissident or dangerous vested rights by its totalitarian power, intrrenches those that remain more securely than in a democracy. So much have vested interests come to be part of the legal and constitutional fabric that even proletarian movements, such as that of the English Labour party, include in their plans for a seizure of power the compensation of vested interests. In the current schemes of economic planning for a controlled capitalism vested interests enter as an important factor: the Tugwell drug control bill was opposed by some on the ground that if the consumer knew in advance all the conditions of marketing, valuable vested interests in advertising would be lost; on the other hand, the liquor control set up under President Franklin D. Roosevelt expressly provided that nothing contained therein could be later construed as having created vested interests which could be defended against governmental action. Latterly among democratic thinkers a tendency has shown itself not so much to fight the vested interests as to extend vested rights and thereby secure a stake in social stability to the lower middle class and the skilled worker. This may well become an important factor in the future in meeting the threat of revolution. But whatever the drift, the idea of vested interests, whether as reality or as symbol, will remain of value so long as a capitalist economic system continues to create legal sanctions for its own operations.

MAX LERNER

See: PROPERTY; INTERESTS; NATURAL LAW; NATURAL RIGHTS; LIBERTY; DUE PROCESS OF LAW; FREEDOM OF CONTRACT; CONTRACT CLAUSE; LAW; CAPITALISM.

Consult: Veblen, Thorstein, *The Vested Interests and*

Social Science